Contract Provisions

For Construction of:

I-5 MP 132.84 TO MP 134.41

I-5
M ST TO PORTLAND AVE - HOV

PIERCE COUNTY

VOLUME 4 OF 4

A STATE PROJECT

Washington State Department of Transportation

APPENDIX C

Temporary Erosion and Sediment Control Plan Narrative

Tacoma/Pierce County HOV Program

I-5: M Street to Portland Avenue - HOV
MP 132.81 to MP 134.41

Temporary Erosion Sediment Control Plan Narrative

Region Review Concurred
July 2013
Revised March 2014

Washington State
Department of Transportation

APPENDIX C

Olympic Region
Plan Revision Date
March 2014

Project Engineer
John Ho PE

Designers
Eric Quinn
Bill Judge FE
Mustafa Mohamedali PE PMP

TESC Plan Reviewers
Jeff Williams

Ad Date
March 2014

TABLE OF CONTENTS

Temporary Erosion Sediment Control Planning

The Washington State Department of Transportation's (WSDOT) temporary erosion and sediment control (TESC) plans consist of a narrative and plan sheets. These describe the temporary best management practices (BMPs) selected for preventing erosion and trapping sediment. In general, the plan sheets provide detail on BMP placement for the final design, while the narrative explains activities for all phases leading up to it.

Purpose of Narrative

This narrative allows WSDOT to meet its internal policy as well as construction permit requirements by having a printed copy of the plan on the construction site for resource agency review.

If the Contractor makes any modifications to the proposed construction staging or the TESC plans as shown in the Contract Plans and Specifications, the Contractor shall prepare a Stormwater Pollution Prevention Plan that addresses all 12 elements of TESC.

Erosion and Sediment Control (ESC) Lead

Name:

Contact Number:

CESCL ID#:

Expiration Date:

Update as needed throughout construction and keep a copy of the current CESCL card in the site log book.

Project Overview and Site Characteristics

The project site is a 1.6-mile section of Interstate 5 (I-5) located in Pierce County from M Street east towards Portland Avenue. This project builds I-5 northbound (NB) and southbound (SB) HOV lanes from South M Street to McKinley Park; constructs retaining walls; excavates ponds; demolishes and replaces the Pacific Avenue and McKinley Way bridges over I-5; builds a new NBI-5 bridge over SR 7/I-705, leaving the existing bridge for HOV; paves Hot Mix Asphalt and Cement Concrete Pavement on I-5 and ramps.

The construction of this project is to be carried out in several stages over several seasons within a span of about four years. The TESC BMPs shall be installed and maintained accordingly.

This project will include the construction of a bioswale and over excavation of unsuitable foundation material within WSDOT ROW between I-5 and McKinley Park. Site investigations have confirmed the presence of petroleum hydrocarbon contaminated soils in this area; however contaminate concentrations from the soil samples tested indicated concentrations were below "MTCA Method A" cleanup levels. Excavated material will be hauled directly to the LRI Landfill or other approved facility. All material will be handled and hauled in a manner that prevents the spread of contamination to air, adjacent soil, and water.

This project will also include exposing and removing Vault 1 together with contaminated soil buried within the vault during the construction of the I-5 interchange with SR 7 and I-705 in the mid 1980's. The vault is located in the infield between the northbound I-5 off ramp to northbound I-705 and the southbound I-5 on-ramp from southbound I-705. Records indicate the storage capacity of the vault to be nearly 6,700 cubic yards. The Contract will include removal, haul and disposal of the buried soil and concrete lining at a permitted disposal site. Following removal, typical UST removal procedures would be followed to determine the existence of contamination outside of the constructed vaults. Follow up removal of contaminated soil (if found) would be conducted prior to final grading of the site per the proposed site grading plan.

Dense urban development borders the right of way for most of the project length. The area beyond the shoulders and interior areas of the I-705 interchange within the project limits are currently vegetated. The areas along I-5 mainline, beyond the outside shoulders, are also vegetated between the McKinley overpass and Portland Avenue. The vegetation is dominated by grasses and sedges; however, some trees are located along the interchange ramps and outside shoulders. The highway lanes in the project area are generally crowned along straight segments and super-elevated when curved (and along ramps) to shed to the median and/or outside shoulders, depending on the alignment.

Piped storm water from the I-5 right of way mixes with piped storm water from offsite areas prior to discharge to the receiving waters.

The downstream receiving waters for the project are the Thea Foss Waterway and Puyallup River, both of which flow to Commencement Bay of the Puget Sound.

Terrain and Drainage Basins

The project site is divided into four contributing basins coinciding to a large extent to TDAs defined by existing surfaces. These basins eventually flow to the Thea Foss Waterway and the Puyallup River, both of which flow to Commencement Bay of Puget Sound:

1. A portion of the M Street to Portland Avenue project is currently treated and controlled by the Yakima Ponds. Some incidental treatment of I-5 runoff may occur in ditches within the I-5 right of way. The Yakima ponds between Yakima Ave. and "G" street off the right shoulder of SB I-5 discharge into a City Of Tacoma storm line that conveys flow to the Thea

Foss Waterway.

2. The western boundary of the I-705 interchange basin is near Yakima Street. The eastern boundary is shared with the McKinley basin. An existing underdrain pipe provides flow control for the western half. WSDOT storm lines connect to 42 and 72 inch COT pipes that converge on the south side of I-5 near the junction with SR 7. The 72 inch line continues northward along I-705 for 2,466 feet beyond the project limits. It increases to 96 inches in diameter before draining to the Thea Foss Waterway.

3. Encompassing a small, northwest portion of the I-5/I-705 interchange, along the Pacific Avenue ramp, storm runoff from the Pacific basin currently receives minimal treatment (ditches) and no flow control, Runoff joins a 15 inch COT storm line along Pacific Avenue, heading northeast to the Thea Foss Waterway.

4. The McKinley basin shares its western boundary with the I-705 basin and its eastern boundary with Puyallup basin. Runoff drains to a piped storm drain system owned by the City of Tacoma and discharges to the Puyallup River at an outfall location approximately 2,500 feet downstream of the I-5 Bridge crossing of the river (the Cleveland Way pump station outfall). All of the runoff within this basin drains to a low point near East R Street.

5. Sole source recharge aquifers occur in the southwest quadrant of the I-705 interchange. However there are no temporary or permanent ponds planned in this area.

TESC Strategy

The TESC strategy has two levels: Basic and Moderate.
The Basic level (approximately May through September) will be illustrated in the Contract Plans. It will make use of standard BMPs, such as inlet protection, check dams, silt fence, silt traps, temporary ponds and stand-pipe sumps, stabilized construction entrances, and seeding and mulching.

Due to the linear nature of the project, and limited available staging areas, it is anticipated that the Contractor will establish a concrete-water cleanup area. The Contractor will likely need to pump or haul, and treat concrete-laden process water prior to disposal. The Contractor shall install the BMPs shown in the plans as a first order of work in each area under construction or as directed by the Engineer.

The Moderate level (approximately October through April) will incorporate all elements of the Basic level. Additionally, it is anticipated that further BMPs will be necessary to clean the stormwater runoff to meet permit compliance before it leaves the site. In this case the Contractor shall provide other BMPs which will include the use of Chitosan enhanced sand filtration (CESF) water treatment systems to reduce turbidity, systems to control pH, dewatering bags, or off-site trucking to approved locations or other BMPs as directed or approved by the Engineer.

Seasonally high groundwater conditions may infiltrate into the ponds and may affect settling and detention functions of the BMPs. The TESC drawings identify critical areas (wetlands, ditches, streams). The basic design conveys treated stormwater runoff from the TESC ponds and/or treatment facilities to the City of Tacoma (COT) stormwater system. It is possible that the stormwater runoff will need to be metered, collected and conveyed by pumping to tanks or disposal areas designated by or approved the Engineer. Other possible BMPs include the use of dewatering bags, Polyacrylamide (PAM), and/or filtration systems, or other methods as directed by the Engineer. PAM shall not be used in conjunction with Chitosan enhanced treatment.

Construction Stormwater within the bioswale and over excavation areas will be contained and managed as contaminated. Water will be collected and pumped to baker tanks for batch testing. Water that is in compliance with City of Tacoma standards will be discharged to the COT sanitary sewer. Water that does not meet standards will be disposed of at an approved disposal facility. Offsite Stormwater will be diverted around the excavation areas using temporary curbs and sandbags.

Stormwater generated from the Vault 1 site shall be isolated, conveyed and collected by a system of temporary catch basins and pumped to baker tanks for batch testing, as it is expected to become contaminated if it comes in contact with the contaminated soil. Water that is in compliance with City of Tacoma standards will be discharged to the COT sanitary sewer. Offsite Stormwater will be diverted around the excavation areas to the maximum feasible extent using temporary curbs and sandbags.

Factors Affecting Erodibility

Soils

The soil and groundwater conditions within the M Street to Portland Avenue project limits vary significantly. Soil conditions relevant to this project are described below. More detailed information is presented in Table GC.B-4 of the Appendix to the Geotechnical Memorandum. The soil permeability in the I-705 interchange area is moderate to low. Fine silts occur throughout the project area. due to a high water table, infiltration is not planned as a TESC BMP. Further investigative drilling and monitoring of existing piezometers is proceeding and information especially on ground water table will be updated as it is received.

South M Street to I-5/I-705 Interchange

- Fill material in this area ranges from silty sand to gravel. The degree of consolidation ranges from loose to dense. Localized areas of 20-foot-thick loose soils were encountered 40 to 50 feet below ground surface. Dense, compact glacial till is both at the surface and underlying the fill material and contains cobbles and boulders. Very dense gravel and sand comprise the advance outwash that underlies the glacial till. Groundwater is present at about 35 feet below ground surface in some areas and at about 75 feet in others.

I-5/I-705 Interchange

- Fill in this area is highly variable both in material type and degree of consolidation. Depth of fill material ranges from 0 to 50 feet. Glacial deposits in this area are composed of dense sand and gravel interspersed with cobbles and boulders as shallow as 4 feet below ground surface, or underlying the fill material at a depth of 50 feet below ground surface. Organic lenses are occasionally encountered lower than 25 feet below ground surface. Groundwater is present at lower elevations at varying depths from 5 to 30 feet below ground surface. Pond and storm sewer construction will encounter this groundwater. Artesian groundwater conditions were encountered at about 20 feet below ground surface.

I-5/I-705 Interchange to just West of the Portland Avenue Interchange

- In this area, relatively unconsolidated recessional outwash is present in the first five feet below ground surface. More dense silt, sand, and gravel ice contact deposits are present in the first 15 feet below ground surface. Areas of very dense glacial till and Pre-Fraser coarse-grained deposits are interspersed throughout the soil matrix. Groundwater is generally not present in this area.
- Local soils easily erode. Sediment from construction activity is a significant risk.
- Based on field investigation infiltration rates are low. BMPs and infiltration is not planned as a TESC BMP.
- Silty soils will be suspended and will require BMPs be maintained. Tire washes and street sweeping will be provided.
- Test borings, piezometers, and test pits found significant seasonal variations in groundwater level. Perched groundwater conditions and seeps were noted towards the end of the NBN wall near the Pacific Ave bridge and along the SBN and SNB walls near the McKinley bridge. Managing seepage and dewatering discharge with appropriate conveyance and treatment BMPs will be a significant TESC activity on this project.

Precipitation

- Local jurisdictions and WSDOT HRM June 2011 section 4-3.3 sets the design precipitation requirements for TESC BMPs. Area precipitation is moderate allowing for on-site mitigation of construction impacts except those requiring approved off-site disposal. Isopluvial maps indicate a Mean Annual Precipitation of 36 inches and a 10 year/24 hour precipitation of 3 inches (upper limit).
- In general work will continue year round for the duration of the project. Earth moving activities are expected to occur during the dry and wet weather for the duration of construction. Upland grading and excavation may be exposed during storms and will need to be covered to prevent erosion.
- Exposed upland grading and excavation will need to be covered before storms and to prevent erosion. Roads and ramps will be reconfigured from stage to stage. Placement of BMPs like silt fence, check dams, inlet protection and conveyance to temporary TESC ponds, sumps, storage and treatment facilities will need to be adjusted to each phase.

- BMPs will be installed as first order of work or as soon as practical depending on when specific land disturbing and other construction activities are initiated.
- The Engineer may require and direct the Contractor to implement additional temporary control measures if it appears pollution or erosion may result from weather, the nature of the materials, or progress on the Work beyond what is anticipated.

Topography

- The natural topography of the area generally slopes towards the north and east and the work within the project limits is primarily in cut. The exception to the general slopes is the segment between the interchange and McKinley Bridge which slopes west towards the low "valley" formed by the railroad. Urban developments and associated drainage on the south side capture most of the off-site runoff outside of WSDOT right of way.
- The project is located in a developed urban area where previous activity impacted vegetation and wetlands. Erosion control will rely solely on project BMPs.
- The project site includes steep embankments at the bridge approaches and some ramps. BMP placement and maintenance will be important during this grading work to prevent turbid water from reaching city streets where paved grades would make it difficult to control the turbid water. Walls included for stability will minimize the grade and length of these slopes. Stabilized soils are included to minimize long-term erosion. Silt fence will be used where existing slopes will be disturbed. Hydro-seeding, long-term mulch, compost socks and erosion control blankets will be considered for all design slopes. Check dams and erosion control blankets will be considered for new and existing ditches in the project area.

Vegetation

- For most of the project area construction is planned to minimize impacts to wetland vegetation. Impacts and mitigation are addressed in the environmental permit conditions. The project stormwater BMPs and landscaping are designed to improve the current vegetation while meeting roadside safety requirements.
- Vegetation removal will be planned to match staged construction. Temporary access roads will be re-vegetated as bridge and embankment work is completed.

Adjacent Areas

- The north side of I-5 along this corridor is predominantly commercial development and public parking for the Tacoma Dome and the south side consists primarily of parks and residential use.
- Topography will help separate construction runoff to separate project areas. The objective is to contain runoff within WSDOT ROW until compliance is achieved after which it will be discharged to the COT system.
- Dust, sediment, noise and fluids from construction equipment will need to be controlled to limit adverse impacts to neighboring properties including the railroad, running north-south, through the interchange area.

- There is little or no surface runoff from neighboring offsite flows that cross the I-5 right-of-way. The project design and construction will maintain existing conveyance. BMPS will be provided to protect existing culvert inlets and outlets from construction activities. Sheet flows on top of proposed cut wall locations will be captured and redirected to existing drainage structures by means of French drains or sand bag berms in order to keep the work area dry.

Groundwater

- This project has both cut and fill slopes and work sites where areas of permanent high groundwater is anticipated. Need for dewatering is also anticipated. Groundwater will be treated as noted in TESC Element 10: Control Dewatering [8-01.3(1)].
- Wetland categories II through IV are present in the project area. There are jurisdictional ditches and wetlands along the top side of cut walls NBN and SNB, the NBS off-ramp and NNB on-ramp. Wetlands in the McKinley Park area are fully impacted and mitigated.
- There are obvious routes where there is a risk of turbid water entering the wetlands.
- Check dams, sand bag berms, silt fence and high-visibility fence will be used to prevent impacts to the wetlands.

Project Construction

The following is a summary of the TESC work and general order of precedence that is required to mitigate the construction scope and sequence for this project. Proposed ponds in the northwest and northeast quadrants of the I-5/I-705 interchange area will be used as temporary TESC ponds for this project. A new TESC pond is planned towards the east end of the proposed bioswale off the shoulder off northbound I-5, adjacent to McKinley Park. In addition a segment of the existing Yakima pond built under an earlier contract may be partitioned to act as a temporary TESC storage pond. This order of precedence is guidance for the specific construction sequence of BMPs as shown in plan sheets that may be adapted by the Contractor in compliance with the permits, plans and specifications of this contract and the construction staging sequence:

a) Stake clearing and grubbing limits for the project.
b) Stake wetland and other sensitive areas, install high visibility fence.
c) Construct temporary erosion and sediment control BMPs associated with clearing and grubbing activities.
d) Begin clearing and grubbing activities for BMP installations as necessary.
e) Install stabilized construction entrances for each work area (including wheel-washes if required).
f) Construct temporary BMPs associated with walls, drainage and roadway construction.
g) Construct new drainage systems.
h) Install temporary conveyance system to TESC ponds, temporary storage tanks, existing or new drainage systems and treatment systems.
i) Supply and install Chitosan as needed.
j) Supply and install pH treatment systems as needed.
k) Establish process water treatment and disposal routines if and as permitted by local authorities. Otherwise establish storage and haulage off site to permitted disposal locations.
l) Install and maintain applicable temporary erosion and sediment control BMPs as construction progresses.
m) Begin clearing and grubbing activities for remaining construction.
n) Construct roadway, walls and bridges.
o) Continue operating and maintaining BMPs as established and installed as work proceeds to completion.
p) Begin roadway paving, striping and signing activities.
q) Begin or finalize, media filter drain, and bio-filtration swale construction.
r) Install permanent seeding and mulching and other landscaping items.
s) Clean permanent drainage used for TESC.
t) Remove temporary BMPs and all associated hardware from project limits as directed by the Engineer.

Risk Analysis and BMP Selection

The narrative addresses 12 TESC elements. In each of the sections below, the erosion/sediment control risks for the elements are discussed in detail. Appropriate BMPs are identified in WSDOT Highway Runoff Manual (HRM) November 2011, Chapter 6, Appendix 6A, the Standard Specification references are provided. Appropriate General Special Provisions and/or the Special Provisions shall be used where applicable.

The major risks that may be encountered during the execution of this project include:

- Contaminant spills, including contaminated water and excavated materials, outside of the containment areas surrounding Vault 1 and the bioswale and over excavation area.
- Turbidity limits being exceeded due to unexpected events or BMP failures.
- Hazardous material spill.

The contractor shall address the contaminant spill mitigation plans in his SPCC plan and the plan for the execution of Vault 1 work as required under the applicable Special Provisions.

To address the risk of turbidity limits being exceeded, in addition to notifying the authorities, the contractor will have the required levels of BMPs stockpiled on site to replaced failed features and have sufficient mobile storage capacity for holding discharges that fail to meet requirements until further treatment and/or hauling the TESC water away for further treatment and disposal to permitted locations elsewhere.

Mitigation of hazardous material spill shall be carried out as described in the SPCC plan developed by the contractor and approved by the Engineer.

TESC Element 1: Mark Clearing Limits

Road, bridge, wall and drainage construction will occur adjacent to identified wetlands. Construction may occur close to right-of-way boundaries or sensitive resources.

WSDOT or project partners shall survey, stake and flag the clearing limits and/or areas not to be disturbed, sensitive areas and drainage courses before any clearing and grubbing can begin. Protected wetlands and buffers will be identified by the use of high-visibility fencing. Duff layer, native topsoil and existing vegetation will be retained in an undisturbed state to the maximum practical extent.

Preserving vegetation to the maximum extent and high-visibility fencing are the primary physical BMPs for TESC Element 1.
BMPs Identified:

- Vegetation Protection and Restoration 1-07.16(2), HRM 6A-2.7
- High visibility fence HRM 6A-2.11, Std. Plan I-10.10-01

TESC Element 2: Establish Construction Access

High groundwater levels and fine alluvial deposits at the project site create a risk that construction equipment could track sediments onto paved roads and sediments could be windblown offsite.

Tracking sediment onto paved roads will be minimized. All vehicular traffic arriving at or leaving exposed earth and grading areas will be restricted to stabilized construction entrances and/or designated access points at locations shown in the plans or approved by the engineer. Locations of construction entrances will be adjusted as needed by construction staging. Tire wash stations will be added if necessary and/or as jointly determined by the Contractor ESC Lead and WSDOT Inspection Personnel. If any sediment is transported onto a road surface, the road will be cleaned thoroughly at the end of each work day or more often if necessary. Sediment will be removed from the roadway by sweeping, utilizing self-propelled pickup sweepers, or other comparable means.

Tracking of sediment from the Vault Removal or Bioswale/Over Excavation/Trenchless areas onto the roadways will not be allowed. Tires at these locations will be inspected and then washed as needed to prevent trackout. Vehicles will be visually checked before leaving the sites.

The physical BMPs for TESC Element 2 are stabilized construction entrances, street cleaning, construction road stabilization, and tire wash stations as necessary.

BMPs Identified:

- Stabilized Construction Entrance 8-01.3(7), Std. Plan I-80.10-01, 6A-2.12
- Street Cleaning 8-01.3(8), 6A-2.15 (3)
- Construction road stabilization 6A-2.14
- Temporary Site Access (Vault 1)

TESC Element 3: Control Flow Rates

Project area soils have been determined to have poor infiltration rates. Natural depressions are not available and except for the existing stormwater vault (10 ft. diameter concrete pipe) which is to be decommissioned and removed under this project, no other stormwater detention facilities currently exist within the interchange area for flow control and runoff attenuation for the project.

Proposed ponds in the interchange area will be built as the first order of work to enable them to be utilized as temporary TESC ponds during construction. In addition a dedicated TESC pond (near the Bioswale) and several mobile storage tanks at several locations are planned for sediment control and runoff treatment and these will also provide some flow control and attenuation.

Flows from these detention and treatment systems will be discharged to approved locations at rates approved under City of Tacoma SAD permit conditions. Where existing ditches are used to convey TESC water discharge rates shall be controlled to prevent erosion.

Existing stormwater utilities conveying flows across the I-5 right-of-way may need temporary diversions for the duration of certain project phases. PS&E drainage plan sheets identify diversion locations.

Temporary curbing shall be installed to prevent sheet flow from entering work areas opened within roadway.

BMPs Identified:

- Temporary Ponds, Detention/Retention Pond Construction: 8-01.3(1)E, 6A-2.32
- Sandbag Check Dam: Std. Plan I-50.20-00, HRM 6A-2.21
- Geotextile Check Dam: Standard Plan I-50.10-00, 8-01.3(6)C, HRM 6A-2.21
- Offsite Stormwater Diversion
- Temporary Storage Tanks
- Temporary curb: 8-01.3(13)
- Temporary inlets and conveyance systems (Vault 1)

TESC Element 4: Install Sediment Controls

Roadway excavation, embankment construction and other grading will occur within 4,400 feet of nearest surface waters. To mitigate the risk of highly turbid water discharging into these waters due to construction activities, sediment trapping controls will be installed and maintained prior to and during soil disturbing activities. The intent of these controls is to retain as much construction related sediment as possible on the project site and prevent erosion damage to adjacent properties and wetlands.

Undisturbed natural vegetation will minimize impacts by absorbing rainfall, diminishing runoff volume and velocity, trapping sediment, and stabilizing soils with root structure. Natural vegetation shall be preserved to the maximum extent possible.

Silt fence will reduce the movement of sediment by providing a temporary barrier to sediment-laden runoff. In addition, this BMP will assist in the reduction of sheet flow velocities. To protect culvert ends, silt fence shall be installed as shown in Standard Plan I-30.20-00. Silt fencing shall be installed around existing culvert inlets where land disturbing activities will occur. This BMP will minimize the impact of sediment to a downstream receiving water body by preventing sediment from entering existing ditches and culverts. Compost berms and compost socks or similar BMPs will used to limit and contain sediment laden runoff in small, localized areas or to protect assets from sediment laden runoff.

Temporary check dams shall be installed in proposed and existing ditches where land-disturbing activities will occur. This BMP reduces the velocity of concentrated flows, reduces erosion impacts in swales and ditches, and settles suspended sediments in ponded areas upstream of each check dam. See the TESC plans for placement of the check dams.

Chitosan Enhanced Sand Filtration (CESF) systems will be used at locations as shown on plans or as approved by the engineer to further reduce turbidity to levels required by permit conditions.

Street cleaning will be utilized to control any sediment deposited and track-out on existing paved roads. See TESC Element 2 of this report for a description of this BMP.

BMPs Identified:

- Silt Fence: 8-01.3(9)A, Std. Plan I-30.10-01 and I-30.15-01, I-30.20-00, HRM 6A-2.27
- Temporary sediment trap, Detention/Retention Pond Construction: 8-01.3(1)E, Std. Plan I-80.10-01, HRM 6A-2.31
- Filter berm, Gravel Filter, Wood Chip or Compost Berm: 8-01.3(9)B, Std. Plan I-80.10-01
- Stormwater chemical treatment: HRM 6A-2.24
- Compost Sock: 8-01.3(12), Std. Plan I-30.40-00, HRM 6A-2.26
- Sandbag Check Dam: Std. Plan I-50.20-00, HRM 6A-2.21
- Geotextile Check Dam: Standard Plan I-50.10-00
- CESF systems

TESC Element 5: Stabilize Soils

Clearing and grubbing operations, roadway excavation, embankment construction, staging and stockpiling of earth, and other grading activities will introduce the risk of erosion of fines from the exposed surface causing sediment-laden turbid runoff entering storm water collection systems during storm events.

All exposed, un-worked soils will be stabilized. Soils will be protected from rain, flowing water, and wind erosion. Selected soil stabilization methods must be appropriate to the time of year, site conditions, and duration of use.

Slopes flatter than 1.5:1 may be track walked by contractor equipment where feasible. Slopes too steep to be track walked shall be hydro-seeded or covered with erosion control blankets.

Erodible soils not being worked will be covered in the required time periods whether at final grade or not. In Western Washington this will be two days maximum between October 1 and April 30, and seven days maximum May 1 through September 30. The following physical BMPs are typical elements utilized for TESC Element 5. These elements can be found in Standard Specifications 8-01.3(2) through 8-01.3(10).

TESC and Landscaping plan sheets show locations of proposed BMPs. For BMPs not indicated on these plans, suitable locations and combinations of the following applications will be approved by the Engineer.

Methods for controlling fugitive dust created by construction operations shall be addressed in the Fugitive Dust Control Plan (FDCP) that will be developed by the Contractor.

BMPs Identified:

- Preserving Natural Vegetation, Vegetation Protection and Restoration: 1-07.16(2), HRM 6A-2.7
- Placing Biodegradable Erosion Control: Blanket 8-01.3(3), Std. Plan I-60.10-00 and I-60.20-00, HRM 6A-2.3
- Temporary Mulching: HRM 6A-2.2
- Temporary Seeding, Seeding and Fertilizing: 8-01.3(2)B, HRM 6A-2.1
- Placing Plastic: Covering 8-01.3(5), HRM 6A-2.4
- Permanent Seeding and Planting: Roadside Restoration 8-02
- Preparation for Application: 8-01.3(2)A, HRM 6A-2.16
- Mulching with Long Term Mulch 8-01.3(2)E
- Sandbag Check Dam: Std. Plan I-50.20-00, HRM 6A-2.21
- Geotextile-Encased Check Dam: Standard Plan I-50.10-00, HRM 6A-2.22
- Stabilized Construction Entrance: 8-01.3(7), Std. Plan I-80.10-01, 6A-2.12

TESC Element 6: Protect Slopes

Clearing and grubbing on existing slopes, constructing cut and fill slopes, embankment construction and stockpiling of earth will introduce the risk of erosion of fines from the exposed surface causing sediment-laden turbid runoff entering storm water collection systems during storm events.

Project fill and cut slopes range from 6:1 to 1.5:1. None of the slopes exceed 75 feet in length. Ground water may be present in existing or planned cut slopes. Cut and fill slopes will be constructed in a manner that will minimize erosion. Erodible soils not being worked shall be covered in accordance with Standard Specification 8-01.3(1).

Sheet flows at top of proposed cut wall locations will be captured and redirected to existing drainage structures by means of French drains and/or sand bag berms. Pipe slope drains will redirect the flows to existing or proposed drainage systems in place.

Slopes will be protected as determined by the Engineer. Temporary or permanent ditches will be used for conveyance.

The following are typical BMPs used to minimize erosion during the construction of cut and fill slopes.

BMPs Identified:

- Preserving Natural Vegetation, Vegetation Protection and Restoration: 1-07.16(2)
- Mulching With Long Term Mulch 8-01.3(2)E

- Placing Biodegradable Erosion Control Blanket 8-01.3(3), Std. Plans I-60.10-00, HRM 6A-2.3
- Temporary Seeding, Seeding and Fertilizing: 8-01.3(2)B, HRM 6A-2.1
- Preparation for Application: 8-01.3(2)A, HRM 6A-2.16
- Placing Plastic Covering: 8-01.3(5), HRM 6A-2.4
- Placing Compost Blanket: 8-01.3(4), HRM 6A-2.3
- Compost Socks 8-01.3(12), Std. Plan I-30.40-00, HRM 6A-2.26
- Temporary curb: 8-01.3(13)
- Pipe slope drain: 8-01.3(14), 6A-2.17
- Quarry spalls: 8-15.3(6)
- Sand bags
- French drain

TESC Element 7: Protect Drain Inlets

Land-disturbing activities will occur adjacent to existing storm drain inlets. Storm drain inlet protection shall be installed to trap sediment before it enters existing stormwater utilities and protect new utilities as they are constructed. Inlet protection shall be constructed where and when there is a risk of TESC water entering existing or new drainage systems or as directed by the Engineer.

BMPs identified
Storm Drain Inlet Protection 8-01.3(9)D, Std Plans I-40.10-00 and I-40.20-00, HRM 6A-2.29

- Inlet protection - below grate
- Inlet protection - above grate
- Inlet protection - grate cover
- Inlet protection - inlet protection in unpaved areas

TESC Element 8: Stabilize Channels and Outlets

New ditches will be constructed where runoff from I-5 and ramps does not require inlets and sewer conveyance. New and affected existing ditches will be protected as required using erosion control BMPs like check dams or liner methods as described in Section 6A-2.10 (3)P WSDOT Highway Runoff Manual November 2011, which references Hydraulic Engineering Circular (HEC) 15 Design of Roadside Channels with flexible linings.

BMPs Identified:

- Conveyance Channel Stabilization, Permanent Erosion Control and Ditch Lining: 2-12.3(4), Std. Plan I-60.20-00, HRM 6A-2.10,
- Quarry Spall Check Dam: 8-01.3(6)B, Std. Plan I-50.20-00, HRM 6A2.21
- Sandbag Check Dam 8-01.3(6)C, Std. Plan I-50.20-00, HRM 6A-2.21
- Geotextile Check Dam 8-01.3(6)A, Std. Plan I-50.10-00, HRM 6A-2.21
- Biodegradable Erosion Control Blanket for Ditch Lining

TESC Element 9: Control Pollutants

Project construction will be adjacent to drainage structures and ditches that flow to the City of Tacoma (COT) stormwater system. Work around wetlands shall be done in such a manner as to prevent construction materials from entering the water. Possible sources of pollution include bridge and wall demolition, concrete pavement removal, hot mix asphalt pavement construction, bridge and wall construction, other cast-in-place concrete construction, pavement striping, and the operation and storage of construction equipment. On-site staging of erodible construction materials may be included in this project.

There are two locations within the project area confirmed to have contaminated soils - the McKinley Park Bioswale/over-excavation area and the Vault 1 area. Excavated material from the bioswale/over-excavation area will be hauled directly to the LRI Landfill or other approved facility. Construction Stormwater from both areas will be contained and managed as contaminated. Water will be collected and pumped to baker tanks for batch testing. Water that is in compliance with City of Tacoma standards will be discharged to the COT sanitary sewer. Water that does not meet standards will be disposed of at an approved disposal facility. Offsite Stormwater will be diverted around the excavation areas using temporary curbs and sandbags.

The removal of contaminant storage Vault 1 shall be conducted in strict compliance with the specific permit conditions for the execution of this aspect of the work. The TESC Strategy details the vault construction site to be self-contained and minimizes the level of effort required to maintain the BMP's after initial installation.

Source of pollutants and construction debris shall be handled and disposed of in a manner that will not cause contamination of stormwater or ground water. Control of any hazardous material shall be addressed by the Contractor as indicated in the SPCC plan.

Runoff that has been in contact with green concrete, cement treated soils, demolition and/or rubbelizing activity will be tested for pH and treated to meet permit conditions and GSP 8-01.3(1)a OPT1.GR8 requirements. The contractor shall provide methods for handling pollutants considered hazardous in the SPCC plan. This includes petroleum products, hydraulic fluid, and other hydrocarbons or pH-modifying substances.

A separate area shall be set aside for wash out of concrete delivery trucks, pumping equipment and tools. This area shall not impact surface waters. This effluent is considered process water and shall be treated for pH accordingly.

Methods for controlling fugitive dust shall be addressed in the Fugitive Dust Control Plan (FDCP) that will be developed by the Contractor. The Contractor ESC Lead shall be responsible for ensuring that measures are in place to help minimize fugitive dust.

TESC Element 10: Control Dewatering

Piezometers, test pits, and utility pot-holing indicate that high groundwater elevations are common at the project all year round. When groundwater is encountered in an excavation or other area, it shall be controlled, treated and discharged in accordance with Standard specification 8-01.3(1)C.

Ground water encountered that may have been contaminated with cement treated soils will be tested for pH and treated to meet permit conditions and GSP 8-01.3(1)a OPT1.GR8 requirements.

TESC Element 11: Maintain BMPs

All temporary and permanent erosion and sediment control BMPs shall be maintained as needed to assure continued performance of their intended function. Trapped sediment will be removed and stabilized on site. BMP removal will occur after final site stabilization is achieved or when the Engineer determines that the temporary BMP is no longer needed. Final stabilization means completion of all soil disturbing activities, and establishment of permanent vegetative cover, or permanent stabilization measures to prevent erosion. Disturbed soils resulting from proposed construction and removal of TESC BMPs will be permanently stabilized. The contractor shall inspect and maintain BMPs in accordance with WSDOT Standard Specification 8-01.3(15).

The ESC Lead shall implement and maintain the TESC Plan per 8-01.3(1)B.

TESC Element 12: Manage the Project

To the maximum extent possible, this project will apply the following actions on all stages of the project:

1. Preserve vegetation and minimize disturbance and compaction of native soil, except as needed for construction purposes.
2. Execute order of work to minimize the amount of soil exposed at any one time and prevent transport of sediment from the site during construction.
3. Time sediment control BMP installation in accordance with TESC Element 4.
4. To minimize erosion, follow soil cover timing requirements and exposure limits in TESC Element 5 and Standard Specification 8-01.3(1). Projects that infiltrate all runoff are exempt from the above restrictions. Individual contract special provisions, project engineer directives and permit conditions may be more stringent, based on specific location characteristics or changing site and weather conditions.
5. Coordinate the work of utility contractors and subcontractors to meet requirements of both the TESC and SPCC plans.
6. Maintain a site log book that contains a record of the implementation of the TESC plan and related permit requirements, including the installation and maintenance of BMPs, site inspection reports, and stormwater monitoring information for all discharge locations.

7. Ensure site inspections are being performed as specified in Standard Specification 8-01.3(1)B and in accordance with TESC Element 11. Site inspections may be reduced to one per month on temporarily stabilized inactive sites (sampling must continue weekly if there is a discharge). Keep complete site inspection forms in the site log book.
8. Weekly discharge sampling must be done in accordance with Section 6-4 to ensure compliance. Sampling data must be kept in the site log book.
9. Ensure that the ESC Lead is on-site or on-call at all times and is identified in the TESC plan or site log book. Maintain current contact information so that the contractor's CESCL can be reached by Ecology or others as necessary.

APPENDIX D

Tacoma Rail Contractor's Right-of-Entry

EXHIBIT C – PAGE 1
CONTRACTOR'S
RIGHT OF ENTRY AGREEMENT
FOR CONSTRUCTION PROJECTS ON OR ADJACENT TO PROPERTY OF CITY OF TACOMA - TACOMA RAIL

This Right of Entry Agreement ("Agreement") is entered into effective as of this ____ day of _____2013, by and between "Company Name" ("Contractor"), a _____, whose address is: _____ and CITY OF TACOMA, DEPARTMENT OF PUBLIC WORKS, - MOUNTAIN DIVISION ("Railway"), whose address is: 3628 South 35th St., Tacoma, WA 98409.

Contractor has entered into a Contract dated _____, 2013, with the State of Washington, through its Department of Transportation ("STATE") for the performance of certain work in connection with the project – "Interstate 5 – M Street to Portland Avenue Project"- in the performance of which work the Contractor will necessarily be required to conduct operations within the Railway right of way and property ("Railway Property"). The Contract provides that no work shall be commenced within Railway Property until the Contractor employed in connection with said work for the State executes and delivers to Railway an Agreement, in the form hereof, and shall have provided insurance of the coverage and limits specified in said Contract and Section 2 of this Agreement. If this Agreement is executed by someone other than the Owner, General Partner, President or Vice President of Contractor, evidence will be furnished to the Railway certifying that the signatory is empowered to execute this Agreement for the Contractor.

Accordingly, as consideration of Railway granting permission to Contractor to enter upon Railway Property and Contractor's payment to the City of Tacoma of ONE THOUSAND FIVE HUNDRED DOLLARS and NO CENTS ($1,500.00), Contractor and Railway herein agree as follows:

SECTION 1. RELEASE OF LIABILITY AND INDEMNITY

Contractor shall indemnify and hold Railway and its agents, employees and/or officers harmless from and shall process and defend at its own expense any and all claims, demands, suits at law or equity, actions, penalties, losses, damages or costs, of whatever kind or nature, brought against Railway arising in any manner from the Contractor's or any of Contractor's subcontractors' acts or omissions or failure to perform any obligations hereunder, which shall include but not be limited to interference with the normal movement of trains. . Contractor further agrees to defend the Railway in any litigation, including payment of any costs or attorney's fees, for any claims or actions commenced, arising out of or in connection with acts or activities authorized by this Agreement; Provided, however, **if such claims, demands, suits, at law or equity, actions, penalties, losses, damages or costs are caused by or result from the concurrent negligence of (a) the Contractor or any of its subcontractors and (b) Railway and its agents, employees and/or officers, this indemnity provision shall be valid and enforceable only to the extent of the negligence of the Contractor or any of its subcontractors and provided further** that nothing herein shall require the Contractor to hold harmless or defend Railway, its agents, employees and/or officers from any claims, demands, suits at law or equity, actions, penalties, losses, damages or costs arising from the sole negligence of Railway or its agents, employees and/or officers.

To the fullest extent permitted by law, Contractor further agrees to indemnify, and hold harmless the Railway against and assume the defense of any liabilities asserted against or suffered by the Railway under or related to the Federal Employees Liability Act ("FELA") whenever employees of the Contractor or any of its agents, invitees, or subcontractors claim or allege that they are employees of the Railway or otherwise. This indemnity shall also extend, on the same basis, to FELA claims based on actual or alleged violations of any Federal, State or local laws or regulations, but not limited to, the Safety Appliance Act, the Boiler Inspection Act, the Occupational Health and Safety Act, the Resource Conservation and Recovery Act, and any similar State or Federal statute.

EXHIBIT C – PAGE 2

SECTION 2. INSURANCE.

Before commencing any work under this Agreement, Contractor must provide and maintain in effect throughout the term of this Agreement insurance, at Contractor's expense, covering all of the work and services to be performed hereunder by Contractor and each of its subcontractors, as described below:

(a) During the course of all construction contemplated by this Agreement, Contractor shall obtain and keep in force at its own expense, RAILROAD PROTECTIVE LIABILTY COVERAGE FORM (ISO CG 00 35 06 90 or later), naming Contractor and City of Tacoma as the insured. Said policy shall be of policy limits of no less than $2,000,000.00 (Two Million Dollars) combined single limit of liability per occurrence with a general aggregate limit of $6,000,000.00 (Six Million Dollars), providing coverage for claims of bodily injury and property damage, and physical damage, arising from the Contractor's work or work performed on its behalf.

(b) Contractor shall maintain Commercial General Liability insurance. This insurance must contain broad form contractual liability coverage with a combined single limit of a minimum of $2,000,000 each occurrence and an aggregate limit of at least $6,000,000. Coverage must be purchased on a post 1998 ISO occurrence form or equivalent and include coverage for, but not limit to the following:

- Bodily Injury and Property Damage
- Personal Injury and Advertising Injury
- Fire legal liability
- Products and completed operations

(c) Contractor shall maintain WORKERS' COMPENSATION insurance to comply with statutory limits for all employees, and in the case any work is sublet, Contractor shall require its contractors and subcontractors similarly to provide workers' compensation insurance for all the latter's employees. Contractor shall also maintain, during the life of this policy, employer's liability "stop gap" insurance. The following minimum limits must be maintained:

Workers' Compensation	Statutory
Employer's Liability	$ 1,000,000 per occurrence

(d) Contractor shall maintain BUSINESS AUTOMOBILE INSURANCE coverage in an amount of at least $1,000,000 per occurrence combined single limit of liability per occurrence and in aggregate, and include coverage for, but not limited to the following: (1) Bodily injury and property damage; and (2) Any and all vehicles owned, used or hired.

(e) The Commercial General Liability insurance required pursuant to this Agreement shall be written on an occurrence basis, with an aggregate limit location endorsement for the construction site, and shall provide liability coverage for any and all Loss or Damage. Such insurance shall include blanket contractual coverage, including coverage for this Agreement as now or hereafter amended and specific coverage for the indemnity provisions set forth herein as now or hereafter amended.

(f) Each insurance policy required by this Agreement shall be primary as respects any coverage maintained by City of Tacoma and shall include an endorsement reflecting the same. Any other coverage maintained by City of Tacoma shall be excess of this coverage herein defined as primary and shall not contribute with it. Each insurance policy obtained pursuant to this Agreement shall be endorsed to state that coverage shall not be suspended, voided, canceled, or amended except after 30 days prior written notice of such has been given to City of Tacoma. Each insurance policy obtained pursuant to this Agreement herein shall be issued by financially sound insurers who may lawfully do business in the state of Washington with a financial rating at all times during coverage of no less than an "A IX" in the latest edition of "Best's Key Rating Guide" published by A.M. Best Company. In the event that at any time during Contractor's work, the insurer does not meet

the foregoing standards, Contractor shall give prompt notice to City and shall seek coverage from an insurer that meets the foregoing standards.

(g) Contractor will provide certificates of insurance evidencing the policies and coverage set forth above prior to the commencement of any work and annually thereafter, prior to expiration of the coverage. Upon reasonable advance written notice to Contractor by City of Tacoma, Contractor shall permit City of Tacoma to inspect and copy the policies. The insurance coverage required by this Right of Entry shall not be subject to a self-insured retained limit or deductible. Contractor shall not cause its policies to be cancelled or permit them to lapse. Insurance policies required

pursuant to this section herein shall have no non-standard exclusions unless approved by Tacoma City's Risk Manager or designee.

(h) All policies of insurance required by this Agreement shall specifically name City as an additional named insured without limitation, pursuant to an endorsement approved of by City's Risk Manager or designee.

(i) In the event that any insurance coverage shall lapse, be cancelled, voided, or terminated, Contractor shall cease all work on Railway Property until such time that equivalent or better insurance coverage is put in place and evidence thereof is provided to City.

(j) The Parties hereby waive subrogation rights against each other, and agree to require their respective insurers to waive subrogation rights against the other party and such other party's insurers, to the extent any liability for property damage, bodily injury (including death), or other loss may be covered by the proceeds of insurance. All insurance policies and coverages shall be subject to review by City of Tacoma for adequacy of coverage and policy form. All waivers referred to in this paragraph apply only to the extent permitted by the laws of the state Washington.

(k) The fact that insurance is obtained by Contractor will not be deemed to release or diminish the liability of Contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railway will not be limited by the amount of the required insurance coverage.

Certificates shall be sent to: City of Tacoma dba Tacoma Rail
c/o Real Property Services
3628 South 35th Street
Tacoma, Washington 98409

SECTION 3. CONTRACTOR REQUIREMENTS

(a). While on or about Railway Property, Contractor shall fully comply with Railway's Contractor Requirements, below, including (but not limited to) work zone protective and clearance requirements and personal protective equipment requirements. Contractor shall be responsible for fully informing itself as to Railway "Contractor Requirements".

(b). Prior to entering Railway Property, each person providing labor, material, supervision, or services connected with the work to be performed on or about Railway Property shall register as a contractor at Railway's Contractor Safety Training section of its website at www.tacomarail.com, attend and complete a Safety Orientation session on line at www.contractorsorientation.com, and agree to abide by all applicable safety regulations and rules.

(c). Prior to entering Railway property, the Contractor shall prepare and implement a safety action plan acceptable to Railway. Contractor shall audit its compliance with that plan during the course of its

work. A copy of said plan and audit results shall be kept at the work site and shall be available for inspection by Railway at all reasonable times.

(d). Prior to entering Railway property, the Contractor shall notify the appropriate Railway representative, in writing, at least 30 calendar days in advance of initially commencing work on the Railway's property.

(e). Prior to entering Railway property, the Contractor shall furnish to the Railway, for approval, electronic copies of plans and calculations of any shoring or cribbing proposed to be used over, under, or adjacent to the Railway's tracks, as well as plans for proposed falsework or demolition over Railway's property. The Railway anticipates that comments on each submittal will be provided within 45 calendar days of receipt of said submittal by the Railway.

(f). The Contractor agrees that all work performed hereunder, within the limits of the Railway's right of way shall be performed in a good and workmanlike manner, and in accordance with plans and specifications approved by the Railway. Those changes or modifications during construction that affect safety or the Railway's operations shall also be subject to the Railway's approval. The Railway anticipates that comments on each submittal will be provided within 45 calendar days of receipt of said submittal by the Railway.

(g). When not in use, Contractor's machinery and materials must be kept at least twenty-five (25) feet from the centerline of Railway's nearest track. Contractor must not cross Railway's tracks except at existing open public crossings, without prior written approval.

SECTION 4. PROTECTION OF RAILWAY FACILITIES AND FLAGGER SERVICES

(a). The Contractor shall give a minimum of at least (5) working days notice to Tacoma Rail's Roadmaster at telephone (253) 377-3554, in advance of when flagging services will be required.

(b). Tacoma Rail flagger and protective services and devices will be required and furnished, pursuance to Section 4(c) below, including, but not limited to, for the following conditions:

(1). When Contractor's work activities are located over or under and within twenty-five (25) feet measured horizontally from center line of the nearest track.

(2). When cranes or similar equipment positioned outside of 25-foot horizontally from track center line that could foul the track in the event of tip over or other catastrophic occurrence.

(3). When in the opinion of Tacoma Rail's representative, it is necessary to safeguard Railway's Property, employees, agents, trains, engines and facilities.

(4). When any excavation, without vertical limitation, is performed below the bottom of tie elevation, if, in the opinion of Tacoma Rail's representative, track(s) or other Railway facilities may be subject to movement or settlement.

(5). When work in any way interferes with the safe operation of trains at speeds allowed by track classification.

(6). When any hazard is presented to Railway track, communications, signal, electrical, or other facilities either due to persons, materials, equipment or blasting within twenty-five (25) feet..

(7). Special permission must be obtained from Tacoma Rail before moving heavy or cumbersome objects or equipment which might result in making the track impassable.

(c). Flagging services will be performed by qualified Tacoma Rail flaggers. The base cost per day for (1) flagger is $650.00 which includes vacation allowance, paid holidays, and Unemployment Insurance, Public Liability and Property Damage Insurance, health and welfare benefits, transportation, meals, lodging and supervision, for an eight (8) hour basic day. Overtime and work during holidays will be billed at a rate of $100 per hour. These rates are subject to any increases which may result from Employee- Management negotiations or which may be authorized by Federal authorities. State/Contractor will be billed on actual costs in effect at time work is performed.

(1). A flagging crew generally consists of one employee. However, additional personnel may be required to protect Tacoma Rail Property or personnel.

(2). Each time a flagger is called, the minimum period for billing shall be the eight (8) hour basic day.

(3). The cost of flagger services provided by Tacoma Rail, when deemed necessary by Tacoma Rail's representative, will be borne by the State/Contractor.

SECTION 5: GENERAL PROVISIONS

(a) This Agreement may be changed, modified, amended, or waived only by written agreement executed by the Parties hereto.

(b) In the event either party deems it necessary to institute legal action or proceedings to enforce any right or obligation under this agreement, the Parties hereto agree that any such action or proceedings shall be brought in a State court of competent jurisdiction situated in Pierce County, Washington or in United States District Court for the Western District of Washington. This Agreement shall be interpreted in accordance with the laws of the State of Washington, unless such laws, rules, and regulations are preempted by applicable federal laws, rules, and regulations.

(c) If any provision of the Agreement or any provision of any document incorporated by reference shall be held invalid, such invalidity shall not affect the other provisions of this Agreement which can be given effect without the invalid provision, if such remainder conforms to the requirements of applicable law and the fundamental purpose of the Agreement, and to this end the provisions of this Agreement are declared to be severable.

SIGNATURES ON THE FOLLOWING PAGE

EXHIBIT C – PAGE 6

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed as of the day and year first written above.

CITY OF TACOMA,
Public Works Department

_____
Kurtis D. Kingsolver, P.E.
Interim P.W. Director/City Engineer

_____
Dale King
Tacoma Rail Superintendent

APPROVED:

_____
Kyle Kellem,
Tacoma Rail Roadmaster

APPROVED AS TO FORM:

_____
Michael W. Smith
Deputy City Attorney

"COMPANY NAME"
CONTRACTOR:

_____

By: _____

Title: _____

Date: _____

APPENDIX E

Disputes Review Board Scope of Work and Suggested Administrative Procedures

(August 2, 2010)

Appendix to the Special Provisions Disputes Review Board

Scope of Work

The Scope of Work of the BOARD includes, but is not limited to, the following items of work:

BOARD Consideration of Disputes or Claims: Upon mutual request by the STATE and the CONTRACTOR to review a dispute, the BOARD shall convene to review and consider the issue. Both the STATE and the CONTRACTOR shall be given the opportunity to present evidence at these meetings. The time and location of BOARD meetings shall be determined jointly by the STATE, CONTRACTOR, and BOARD. It is expressly understood that the BOARD members are to act impartially and independently in the consideration of facts and conditions surrounding any dispute presented by the STATE or the CONTRACTOR and that the recommendations concerning any such dispute are advisory.

Procedures: Prior to any hearing involving a contract dispute, the BOARD will meet with the STATE and the CONTRACTOR to establish the rules and procedures which will govern the BOARD's participation in the Project as set forth in the Standard Specifications Section 1-09.11(1) and any modifications to that Standard Specification in the Special Provisions of the construction contract. In establishing the rules and procedures, the parties may consider the Suggested Administrative Procedures included in this Appendix. These Guidelines express in general terms the policy and concept for the operation of a board and are intended to supplement the Standard Specifications and any modifications to the Standard Specifications in the Special Provisions of the construction contract to the extent that no conflict with such provisions is created. The BOARD may establish any internal rules and procedures not covered in the AGREEMENT with the STATE and the CONTRACTOR.

Furnishing Documents: The STATE will furnish to the BOARD three copies of the contract and other documents, which are or may become pertinent to the activities of the BOARD. The CONTRACTOR shall furnish to the BOARD three sets of documents, which are or may become pertinent to the activities of the BOARD, except documents furnished by STATE.

Construction Site Visits: The BOARD members shall visit the project site to keep abreast of construction activities and to develop a familiarity of the work in progress. The frequency, exact time, and duration of these visits shall be as mutually agreed between the STATE, the CONTRACTOR, and the BOARD.

Findings and Recommendations: The BOARD's recommendations resulting from its consideration of a dispute shall be furnished in writing to the STATE and the CONTRACTOR. The recommendations shall be based on the construction contract provisions and the facts and circumstances involved in the dispute. In the event the BOARD's recommendations do not lead to resolution of the dispute, all BOARD records and written recommendations, including any minority reports, will be admissible as evidence in any subsequent litigation.

Contractor Responsibility

The CONTRACTOR shall furnish to each BOARD member, one copy of all pertinent documents which are or may become necessary for the BOARD to perform their function. Pertinent documents may include any drawings or sketches, calculations, procedures, schedules, estimates, or other documents which are created in the planning or the performance of the contract work. Copies of any documents provided to the BOARD must also be furnished to the STATE.

State Responsibility

The STATE shall furnish the following services and items:

A. Contract-Related Documents: The STATE shall furnish the BOARD three copies of the contract documents, including change orders, written instructions issued by the STATE to the CONTRACTOR, or other documents pertinent to the performance of the contract, and therefore, necessary to the BOARD's work.

B. Coordination and Services: The STATE's project engineer for the contract will, in cooperation with the CONTRACTOR, coordinate the operations of the BOARD. The STATE, through the project engineer, will arrange or provide conference facilities at or near the contract site and provide secretarial and copying services.

Suggested Administrative Procedures

Objective

The principal objective of the BOARD is to assist in the resolution of disputes, which would otherwise be submitted to litigation processes, and encourage the STATE and the CONTRACTOR to resolve issues at the lowest level possible. If this objective is achieved, such disputes can be resolved promptly, with minimum expense, and with minimum disruption to the administration and performance of the work. It is not intended for the STATE or the CONTRACTOR to default on their normal responsibility to amicably and fairly settle their differences by indiscriminately assigning them to the BOARD. It is intended that the mere existence of the BOARD will encourage the STATE and the CONTRACTOR to resolve potential disputes without resorting to this appeal procedure. But when a dispute which is serious enough to warrant the BOARD's review does develop, the machinery for prompt and efficient action will already be in place.

The BOARD, the STATE and the CONTRACTOR shall develop by agreement the BOARD's rules of operations and procedures to be followed for the PROJECT. In developing the agreement, the parties shall take into consideration their respective duties and responsibilities as set forth in their various agreements. Below are definitions of the responsibilities of theBOARD, and general guidelines which may be considered in developing the rules of operations and procedures for the BOARD. These guidelines express, in general terms, the policy for the creation and operation of the BOARD based on the STATE's Standard Specification 1-09.11(1), and any modification to that Standard Specification in the Special Provisions of the construction Contract.

Responsibility of the BOARD

The BOARD will render findings and recommendations on disputes between the

CONTRACTOR and the STATE arising from the construction contract. Primarily, the BOARD will consider claims and disputes involving interpretation of the Plans, Specifications, Special Provisions, delays, acceleration of the work, scheduling, classification of extra work, changed conditions, design changes, and the like. During its regular visits to the job site, the BOARD will encourage the settlement of differences at the job level.

The BOARD will refrain from officially giving any advice or consultative services to either party. The individual members will act in a completely independent manner and will have no consultative or business connections with either party, except for payments for services on the BOARD.

During routine meetings of the BOARD as well as during formal hearings, BOARD members should refrain from expressing opinions on the merits of statements on matters under dispute or potential dispute. Opinions of BOARD members expressed in private sessions should be kept strictly confidential.

Normally, the BOARD member selected by the first two as the Third Party Member will act as Chairman for all activities. However, this post may be delegated to another member from time to time.

Regular Construction Progress Meetings

All regular meetings are expected to be held at or near the job site. The frequency of regular meetings will be set by agreement of the BOARD, the STATE and the CONTRACTOR, consistent with the construction activities and the matters under consideration and dispute. Each meeting is expected to consist of a round table discussion and a field inspection of the work being performed on that contract. A member of the STATE's staff is expected to conduct the round table discussion, and the round table discussion attendees are expected to include selected personnel from the STATE and the CONTRACTOR. The agenda for each meeting will be set by the BOARD and may include the following elements in an order to be determined by the BOARD:

- Meeting opened by Chairman of the BOARD.
- Remarks by the STATE's representative.
- A description by the CONTRACTOR of work accomplished since the last meeting, the current status of the work schedule, and a forecast for the coming period.
- An outline, by the CONTRACTOR, of potential problems and a description of same.
- An outline, by the STATE's Project Engineer, of the status of the work from the STATE's point of view, including an assessment of potential problems and a description of same, if any, from the STATE's point of view.
- A brief description, by the CONTRACTOR or the STATE, of potential claims or disputes, which have surfaced since the last meeting.
- A summary, by the CONTRACTOR, the STATE or the BOARD, of the status of past disputes and claims.

The STATE will prepare minutes of all regular meetings and circulate them for revision and approval by all concerned.

The field inspection will cover all active segments of the work, the BOARD being accompanied by both STATE and CONTRACTOR personnel.

Handling of Disputes

When the BOARD receives a written notice of dispute as described in the Standard Specifications Section 1-09.11, and any modification to that Standard Specification in the Special Provisions of the construction Contract, it shall reach agreement with the parties on a time to conduct the hearings. The decision shall be tempered by the desires and needs of the STATE and the CONTRACTOR. If the matter is not urgent, it may be scheduled for the time of the next regular visitation to the project. For an urgent matter, the BOARD shall make every effort to meet at its earliest convenience.

The BOARD may also request that written documentation concerning the dispute be sent to each individual member for study before the hearing begins. A party furnishing any written documentation to the BOARD must furnish copies of such information to the other party before the hearing begins.

Normally, the hearings would be conducted at the job site. However, any location which would be more convenient and still provide all required facilities and access to the necessary documentation would be satisfactory. Private sessions of the BOARD may also be held at a location other than the job site.

For the hearings on disputes, the Third Party Member or one of the other members designated by the Third Party Member of the BOARD will act as Chairperson. The STATE and the CONTRACTOR will have a representative at all hearings. The claimant will discuss the dispute followed by the other party. Each party will then be allowed one or more rebuttals until all aspects are thoroughly covered. Each time a person testifies, the BOARD members may ask questions, seek clarification, or request further data. The BOARD may request from either party documents or information which would assist the BOARD in making its findings and recommendations, including, but not limited to, documents used by the CONTRACTOR in preparing the bid for this project. A refusal by a party to provide information requested by the BOARD may be considered by the BOARD in making its findings and recommendations. In large or complex issues, one or more additional hearings may be necessary in order to consider all the evidence presented by both parties.

During open hearings, no BOARD member should express an opinion concerning the merit of any facet of the dispute. By the same token, all BOARD deliberations should be conducted in private, with all interim individual views kept strictly confidential.

After the hearings are concluded, the BOARD shall meet in private and reach a conclusion supported by two or more members. Its findings and recommendations, together with its reasons shall then be submitted as a written report to both parties. The recommendations shall be based on the pertinent contract provisions and facts and circumstances involved in the dispute. The BOARD should make every effort to reach a unanimous decision. If this proves impossible, the dissenting member may prepare a minority report.

After receiving the BOARD recommendations, the STATE and the CONTRACTOR shall respond to the other in writing signifying that the dispute is either resolved, or remains unresolved. Although both parties should place weight upon the BOARD's recommendations, they are not binding. However, if the BOARD's recommendations do not resolve the dispute, all records, and written recommendations, including any minority reports, may be admissible as evidence in any subsequent litigation. If the BOARD's assistance has not resolved the dispute, the CONTRACTOR must file a claim in accordance with the STATE's Standard Specification 1-09.11(2), Claims, before seeking judicial relief.

Miscellaneous

It is not desirable to adopt hard and fast rules for the functioning of the BOARD. The entire procedure is expected to be flexible enough to respond appropriately to changing situations. The BOARD should initiate, along with the STATE and CONTRACTOR's concurrence, new rules or modifications to old ones whenever this is deemed appropriate.

APPENDIX F

Unanticipated Discovery Plan

PLAN AND PROCEDURES FOR THE UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES AND HUMAN SKELETAL REMAINS FOR THE TACOMA HOV PROJECTS, PIERCE COUNTY WASHINGTON

1. INTRODUCTION

The Washington State Department of Transportation (WSDOT) plans to construct the following projects:

- I-5: M Street to Portland Avenue- HOV
- I-5: Portland Avenue to Port of Tacoma Road – Southbound HOV
- I-5: Portland Avenue to Port of Tacoma Road – Northbound HOV
- Clear Creek Riverside Mitigation Site

The purpose of these projects is to increase traffic efficiency and mobility through the I-5 corridor. These construction projects may lead to unanticipated discovery of cultural resources.

The following Unanticipated Discovery Plan (UDP) outlines the procedures to be implemented, in accordance with state and federal laws, if National Register of Historic Places (NRHP) potentially-eligible and ineligible cultural resource materials are discovered during construction. The separate protocol for discovery of human skeletal remains is described below, in Section 5.

All artifacts collected on tribal property, tribal trust property, or WSDOT property within the Puyallup Tribe Reservation boundaries will be transferred to the Puyallup Tribe of Indians, pursuant to the "Procedure for Management of Cultural Resource Materials for the Tacoma/Pierce County HOV Program".

2. RECOGNIZING CULTURAL RESOURCES

A cultural resource is an item of historical, traditional, or cultural importance. The item could be prehistoric or historic. Examples include:

- A multi-species accumulation of shell (shell-midden) with associated bone, stone, antler or wood artifacts, burned rocks or charcoal.
- Bones that appear to be human or animal bones associated with a shell-midden (i.e. with associated artifacts or cooking features).
- An area of charcoal or very dark stained soil with associated artifacts,
- Artifacts made of chipped or ground stone (i.e. an arrowhead, adze or maul) or an accumulation (more than one) of cryptocrystalline stone flakes (lithic debitage),
- Basketry, cedar garments, fish weir stakes or items made of botanical materials,
- Clusters of tin cans or bottles, logging or agricultural equipment that appear to be older than 50 years,
- Buried railroad tracks, decking, or other industrial materials.

Not all cultural resource material encountered will be potentially-eligible for listing on the NRHP. To be eligible for the NRHP cultural resources identified during construction must be 50 years of age or older, meet one or more of the four criteria listed below, and retain sufficient physical integrity to convey historical significance (36 CFR 60.4). A building, site, object, or structure may be considered for inclusion in the NRHP if it meets at least one of the following criteria:

1. The property is associated with events that have made a significant contribution to the broad patterns of our history.
2. The property is associated with the lives of persons significant in our past.
3. The property embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components might lack individual distinction.
4. The property has yielded, or might be likely to yield, information important in prehistory or history.

The following archaeological resources will indicate potentially NRHP-eligible deposits and will be assumed NRHP-eligible until determined otherwise by FHWA and WSDOT in consultation with interested and affected tribes and the State Historic Preservation Officer (SHPO).

- Pre-contact deposits (such as midden deposits) associated with Native American use or occupation.
- Historic era non-Native American artifacts from NRHP-eligible (or potentially NRHP eligible) deposits (native soil or surfaces that were stable and exposed either between fill episodes, or after the conclusion of historic filling).
- Historic features consisting of stratified deposits with artifact concentrations that appear to be spatially or temporally distinct. This includes refuse deposits, privies, or other discrete accumulations.
- Courses of brick or other architectural materials that are part of a building foundation or pavement in their original position.
- Historic era non-Native American artifacts from non-eligible contexts, only if they are diagnostic or have educational value.

Examples of deposits that will not be considered NRHP eligible include:

- Isolated or loose construction materials (brick, mortar, window glass), bottles, cans, located within fill sediments (not located in primary context).
- Mass deposits of lumber, concrete, granite, coal, etc.
- Pilings, decking, trestle, and railroad track, unless of clearly unusual construction.
- Historic-era artifacts not associated with a feature or stable surface.

Artifacts or deposits that are not potentially eligible, as described above, will be noted in daily field logs, photographed and documented on scaled site plans if possible. The protocol for unanticipated discovery, including the stop work clause noted in the procedure below will not be implemented for artifacts or deposits that are not potentially eligible for listing in the National Register.

3. ON-SITE RESPONSIBILITIES

The project Site Inspector and Cultural Resource Monitor are responsible for implementing steps 1-3 of the following procedure if cultural resource material is encountered during construction.

Step 1. STOP WORK IMMEDIATELY.

If any WSDOT employee, contractor or subcontractor believes that he or she has uncovered any cultural resource during construction of the project, all work adjacent to the discovery must stop. The discovery location should not be left unsecured at any time. Cultural resources encountered during an archaeological survey are intentional discoveries and are not covered under this plan.

NOTE: If human remains are encountered, treat them with dignity and respect at all times. Cover the remains with a tarp or other materials (not soil or rocks) for temporary protection in place and to shield them from being photographed. Do not call 911 or speak with the media. Proceed to the protocol stipulated in Section 5, "Plan and Procedures for the Discovery of Human Skeletal Material".

Step 2. NOTIFY MONITOR.

If there is an archaeological monitor for the project, notify that person. The monitor will review the eligibility criteria above, make a recommendation to the artifact or deposits potential eligibility, and will proceed with notification as necessary (so long as the artifact or deposit is determined eligible). If the artifact/deposit is not determined to be NR eligible the monitor will notify the assigned project Cultural Resource Specialist. They will then proceed with noting the discovery in the daily field logs, photographing and documenting the artifact/deposit on a scaled site plan, if possible. After commencement of this documentation, work may proceed at the monitor's discretion.

Step 3. NOTIFY WSDOT PROJECT MANAGEMENT AND CULTURAL RESOURCES PROGRAM.

Contact the WSDOT Environmental Manager and the CR Program Manager listed below:

WSDOT Environmental Manager:
Jeff Sawyer
360-570-6701
Cell: 360-790-9646
sawyerj@wsdot.wa.gov

Cultural Resources Program Manager:
Scott Williams
360-570-6651
Cell: 360-628-3219
willias@wsdot.wa.gov

If you can't reach the CR Program manager, contact your project's assigned Cultural Resources Specialist:

Assigned CR Specialist:
Roger Kiers
360-570-6638
Cell: 360-485-7255
kiersro@wsdot.wa.gov

Step 4. NOTIFY THE PUYALLUP TRIBE:
The Environmental Manager or the Cultural Resources Program Manager will contact the Puyallup Tribal Historic Preservation Department prior to making all other calls and notifications.

Step 5. CONSULTATION AND DOCUMENTATION:

WSDOT personnel will participate in consultation with the Puyallup Tribe Historic Preservation Department, FHWA and DAHP. After consultation, WSDOT and FHWA will complete a written plan of action describing the disposition of cultural resources pursuant to 43 CFR Part 10 and will execute their prescribed duties within that plan of action.

4. FURTHER CONTACTS AND CONSULTATION:

WSDOT Environmental Manager's Responsibilities:

- The WSDOT Environmental Manager is responsible for taking appropriate steps to protect and secure the discovery site. The Environmental manager will ensure all work has stopped in an area adequate to provide for the total security, protection, and integrity of the resource. Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery site.

- The Environmental Manager (or Cultural Resource Specialist, if so delegated) is responsible for notifying the Tribe of the discovery. Work in the immediate area will not resume until treatment of the discovery has been completed following provisions for treating archaeological/cultural material in consultation with the Tribe.

- The WSDOT Environmental Manager shall direct construction to resume away from cultural resources where appropriate and in communication with the Tribe.

- If the CR Program Manager has not yet been reached in earlier attempts, the Environmental Manager will do so.

Cultural Resources Program Manager's Responsibilities:

- If not already notified, the Cultural Resources (CR) Manager (or Cultural Resource Specialist, if so delegated) will notify the Puyallup Tribe's Historic Preservation Department of the discovery.

- The CR Program Manager or the Cultural Resource Specialist (if so delegated by the CR Program Manager) will consult with the Puyallup Tribe's Historic Preservation Department and will ensure that a qualified individual examines the find to determine if it is a cultural resource. If it is determined to not be a cultural resource, work may proceed with no further delay. If it is determined to be a cultural resource, the CR Program Manager or delegate will send a certified letter to the Tribe's Historic Preservation Office, notifying them that a cultural resource has been discovered and requesting further consultation.

- If the discovery is human remains or funerary objects, the Cultural Resource Manager or delegate will follow the procedures described in Section 5.

- The CR Program Manager will contact representatives of the Federal Highway Administration and the Department of Archaeology and Historic Preservation (DAHP).

- The CR Program Manager will ensure that all cultural resource material excavated will be transferred for permanent curation to the Puyallup Tribe of Indians pursuant to the protocol stipulated in the *Procedure for Management of Cultural Resource Materials for the Tacoma/Pierce County HOV Program.*

- The CR Program manager will ensure that any required excavation or removal of cultural resources meets the requirements of 43 CFR Part 10.3 and 16 USC 470 aa. The CR Program Manager will also determine if a permit from the Bureau of Indian Affairs is required.

Federal Agencies:

Federal Highway Administration
Dean Moberg
Area Engineer
360-753-9025
Dean.Moberg@fhwa.dot.gov

Department of Archaeology and Historic Preservation:

Dr. Allyson Brooks
Washington State Historic Preservation Officer
360-586-3066

-Or-
Matthew Sterner
Transportation Archaeologist
360-586-3082

Tribal Liaison:

WSDOT Tribal Liaison
Megan Cotton
360-705-7494
beebym@wsdot.wa.gov

Puyallup Tribe of Indians:

Brandon Reynon
Cultural Resource Specialist
253-573-7986
Cell: 253-225-4807
Brandon.Reynon@puyalluptribe.com

Amber Santiago
Historic Preservation Manager
253-573-7965
Amber.santiago@puyalluptribe.com

5. SPECIAL PROCEDURES FOR THE DISCOVERY OF HUMAN SKELETAL MATERIAL

Any human skeletal remains will at all times be treated with the utmost dignity and respect.

Step 1. STOP WORK: In the event that human remains are discovered all work in the area must stop and the site must be secured.

Step 2. NOTIFICATION: Notify the WSDOT Cultural Resources Program Manager, the Environmental Manager, the Coroner, the Tribal Police and the Tribal Historical Preservation Department immediately. The Coroner (with assistance of law enforcement personnel) will determine if the remains are human, whether the discovery site constitutes a crime scene, and will notify DAHP, the Tribe, and WSDOT.

Pierce County Medical Examiner
253-798-6494

Pierce County Sheriff Department
253-798-7530

City of Tacoma Police Department
253-594-7800

Carrie Berry, HOV Environmental Manager
360-709-8147

Scott Williams, WSDOT Cultural Resource Program Manager
Cell: 360-628-3219

Brandon Reynon, Cultural Regulatory Specialist/Tribal Archaeologist
Cell: 253-414-4156

Puyallup Tribal Police
253-573-7959

Step 3. PROTECT THE REMAINS: Cover the remains with a tarp or other materials (not soil or rocks) for temporary protection in place and to shield them from being photographed. No photographs, drawings or sketches of human remains or funerary objects are allowed without written permission from the Puyallup Tribe Council.

Step 4. CONSULTATION: If the Coroner determines the remains are non-forensic, and if it is determined the remains constitute a cultural resource, WSDOT personnel will participate in consultation with the Puyallup Tribe, FHWA and DAHP. WSDOT will complete a written plan of action describing the disposition of cultural resources pursuant to 43 CFR Part 10. WSDOT will then send a certified letter to the Puyallup Tribe Historic Preservation office describing the duties within that plan of action.

Step 5. PROCEEDING WITH CONSTRUCTION: Project construction outside the discovery location may continue while documentation and assessment of the cultural resources proceed. The WSDOT CR Manager in consultation with the Puyallup Tribe Historic Preservation Office will determine the boundaries of the discovery location. Construction may continue at the discovery location only after the process outlined in this plan is followed and WSDOT (and the federal agencies, if any) determine that compliance with state and federal laws is complete.

APPENDIX G

Agreement UC 684
Supplement 1
City of Tacoma Agreement No. MC 48-2


RAIL


MC48-2

Agreement UC 684 Supplement 1
CITY OF TACOMA Agreement No. MC 48-2

CONSTRUCTION AND MAINTENANCE AGREEMENT I-5 RAILROAD OVERCROSSING WIDENING AT I-705 TACOMA, WASHINGTON

This Construction and Maintenance Agreement Supplement is effective as of this 22nd day of July, 2013, between the State of Washington, through its Department of Transportation, hereinafter referred to as the "State" and the City of Tacoma, Department of Public Works – Tacoma Rail Mountain Division, hereinafter referred to as the "Railway." Collectively the parties are referred to herein as "Parties." This Construction and Maintenance Agreement Supplement is hereafter referred to as "Agreement."

Recitals

WHEREAS, the Railway owns and operates a rail line that is crossed above grade by Interstate 5 at the I-5/I-705/SR-7 interchange in Tacoma, Washington (hereinafter "I-5 Bridge"). The I-5 Bridge is designated as USDOT 396647S; and

WHEREAS, the I-5 Bridge was originally constructed under an agreement known as UC 684, dated August 12, 1963, between the State and the Chicago, Milwaukee, St. Paul, and Pacific Railroad Company ("Original Agreement"). The Original Agreement provided for construction of the I-5 Bridge (referred to in the Original Agreement as Primary State Highway 1) within the Railway's right of way; relocation and reconstruction of portions of SR 7 (referred to in the Original Agreement as Primary State Highway 5) within the Railway's right of way; relocation of the Railway's tracks in order to accommodate construction of the below described State Highway Structures; and facilitated exchange of rights of way between the State and Railway that constitute the existing property rights under which the I-5 Bridge and the Railway's facilities are respectively located; and

WHEREAS, the State, as part of its Interstate 5 – M Street to Portland Avenue Project, proposes to widen the I-5 Bridge by constructing an additional northbound structure abutting the I-5 Bridge (hereinafter "Project"); and

WHEREAS, this Agreement supplements the Original Agreement and provides for the construction, operation, and maintenance of the new portion of the I-5 Bridge within the Railway's right of way, said right of way is described in Exhibit A, ("Property") and updates certain coordination and maintenance provisions within the Original Agreement to include all State highway structures constructed under the Original Agreement and this Agreement (said State highway structures herein collectively referred to as "State Highway Structures"); and

WHEREAS, the Railway is willing, by separate instrument and subject to Tacoma City Council approval, to sell the Property to the State, reserving for itself, its successors and assigns, a permanent easement for the construction, operation and maintenance of its railroad system including railroad tracks, facilities, and requisite appurtenances; and

WHEREAS, Pursuant to Railway Permit No. 2176 the State will establish a temporary construction at grade railroad crossing along the Railway's right of way. The crossing is located within the Property which the State plans to purchase from the Railway. The State requires use of this crossing for Project construction; and

WHEREAS, the State is completing the construction of said Project with State funds, and such federal funds as may be available; and

WHEREAS, as a result of the Project, the Railway has agreed to perform that certain work specified in the terms and conditions herein; and

WHEREAS, the State has authority to enter into this Agreement pursuant to RCW 47.01.260.

NOW, THEREFORE, pursuant to the above recitals that are incorporated herein as if set forth below, and in consideration of the mutual covenants herein contained, it is mutually agreed as follows:

ARTICLE I

SCOPE OF WORK

1. The term "Project" as used herein includes any and all work related to the widening of the I-5 Bridge, through construction of a parallel bridge structure, over the Railway's right of way, as said structure is depicted on Exhibit A, attached hereto and hereby incorporated herein.

2. The Parties shall complete their respective work and related obligations in furtherance of the Project as specified herein.

3. After completion of the Project, the Parties agree to perform the maintenance obligations as specified in this Agreement and to continue to perform the maintenance obligations specified in the Original Agreement in a manner consistent with the obligations of this Agreement.

ARTICLE II

RAILWAY'S OBLIGATIONS

The Railway agrees:

1. To furnish, at State's expense, all labor, materials, tools, and equipment necessary to complete the Railway Work, and to do the Railway Work required for the construction of the Project.

2. That construction of the Project shall include the following work (herein referred to as "Railway Work"):

   (a) Review of plans submitted by the State or its Contractor pursuant to Article III, Section 1 herein;
   (b) Furnishing of railroad flagging services necessary for the safety of the Railway's personnel and property and for the operation of its trains through the contractors working limits during construction of the Project;
   (c) Furnishing engineering and inspection as required or deemed necessary by the Railway in connection with the construction of the Project.

3. To do all Railway Work provided in Article II, Section 2 with its own employees working under Railway's labor agreements or by qualified contractor(s), if necessary, and on an actual cost basis.

4. To request approval from the Tacoma City Council to convey the Property to the State via a quitclaim deed. Further, said quitclaim deed shall reserve to Railway, its successors and assigns, a permanent easement for the reconstruction, operation and maintenance of its railroad system, including railroad tracks, facilities, and requisite appurtenances, upon, along, over, under, and across the Property.

5. That until such time that the quitclaim deed is recorded, the Railway hereby grants to the State a temporary right of entry ("Right of Entry") over said Railway Property to use the at-grade construction crossing and to construct the Project subject to the terms and conditions of this Agreement; provided that:

   (a) The Right of Entry is for construction of the Project only and shall not be used by State for any other purpose. In the event State is evicted by anyone owning, or claiming title to or any interest in said right-of-way, Railway will not be liable to State for any damages, losses or any expenses of any nature whatsoever. The granting of similar rights to others, subsequent to the date of this Agreement, will not impair or interfere with the rights granted to State herein. The Right of Entry given by the Railway to the State in this provision is without warranty of any kind, express or implied, and no covenant of warranty of title will be implied from the use of any word or words herein contained.

(b) The State shall pay the Railway $500 for said Right of Entry prior to the State's use of the Railways property;

(c) The Right of Entry shall expire 180 calendar days after the State's issuance of the Notice to Proceed to the Railway as specified in Article IV, Section 7, or at such time that the quitclaim deed is recorded, whichever occurs first. The Right of Entry may be extended upon written approval of the Railway; and

(d) The State's use of the crossing is subject to the supervision of a Railway flagger or other protective measures as required by the Railway; and

(e) The State expressly understands and agrees that the Railway may at any time with or without cause cancel and terminate the State's above described Right of Entry by giving to the State ninety (90) days written notice of its intention to cancel the same and at the expiration of such notice the Right of Entry shall terminate. Upon receipt of such notice and before the expiration thereof, the State, under the supervision and direction of Railway, shall restore Railway's Property accessed and/or used by the State in a manner satisfactory to the Railway to the condition it was in at the beginning of this Agreement. If the State fails to remove such improvements and restore said Property and right-of-way to such condition within said time period, the Railway at its option may remove any materials, equipment, and/or improvements and restore said Property and right-of-way to their previous condition, and the State shall pay to the Railway the cost and expense thereof. Any fee paid or due under this Agreement shall be prorated to the date of removal of the material, equipment, and/or improvements and restoration of the property.

6. Based on the State's estimate of work over, upon, or adjacent to the Railway's tracks, the cost of railroad flagging services to be provided by Railway is estimated to be $78,000, as detailed in Exhibit B, attached hereto and hereby made a part of this Agreement. The State shall reimburse the Railway for the cost of railroad flagging or other protective necessary measures pursuant to Article VII herein. When practicable, the Railway, at State's cost, may remove the track within the Project limits from service by installing a "derail" or similar protective device at a location of the Railway's choosing, thereby mitigating the extent of railroad flagging required during construction of the project.

ARTICLE III

THE STATE'S OBLIGATIONS

The State agrees:

1. To furnish to the Railway final and complete plans and specifications for the Project. Said plans, shall be submitted to the Railway in PDF format for Railway's approval prior to commencement of construction. After having been approved by all Parties hereto, said plans and specifications are hereby adopted and incorporated into this agreement by reference. Said approval by the Railway shall not be unreasonably withheld or delayed.

2. To construct the I-5 Bridge to provide a minimum vertical clearance of not less 23.5 feet above the top of the high rail of the existing railroad tracks and to provide a minimum horizontal clearance of not less 12 feet from the side of the rail. Any permanent member of the I-5 Bridge located horizontally within 25 feet of the Railway's tracks must be of "Heavy Construction" as defined by AREMA, Chapter 8, Section 2.1.5.1, or be protected by a reinforced concrete crash wall. The State shall not do or permit anything to be done to reduce the horizontal or vertical clearances provided by the plans and specifications; however the Railway continues to reserve the right to make such ballast raises as in its opinion may be justified, and the State shall bear any cost to modify the I-5 Bridge to maintain railway clearances as required under WAC 480-60 or other applicable government regulation.

3. To make any and all arrangements to secure the location or relocation of wire lines, pipe lines and other facilities owned by private persons, companies, corporations, political subdivisions or public utilities other than the Railway which may be found necessary to locate or relocate in any manner whatsoever due to the construction of the project.

4. To construct the Project as shown on Exhibit A and do all work in compliance with the final and complete plans and specifications approved by the Railway pursuant to Article III, Section 1, above.

5. To furnish all labor, materials, tools, and equipment in performing the work described herein. All work of construction with respect to the Project shall be undertaken by State, or State's contractor and shall be performed at such times as shall not endanger or interfere with the safe and timely operations of the Railway's tracks and other facilities.

6. To require its contractor(s) to notify the appropriate Railway representative, in writing, at least thirty (30) calendar days in advance of initially commencing work on the Railway's property. Qualified Railway flagmen will be required and furnished whenever, in the opinion of the Railway, it is necessary to safeguard railway property, employees, trains, engines and railroad facilities.

7. To facilitate scheduling for the Project by requiring its contractor(s) to give Railway's representative thirty (30) calendar days advance notice of the times and dates for proposed work windows. Railway and State's contractor will make all efforts to establish mutually agreeable work windows for the Project. The Railway has the right at any time to revise or change the work windows, due to train operations,

service obligations, or other operational or maintenance requirements of the Railway without liability for delay or impact damages.

8. To reimburse Railway for any additional costs incurred by Railway if the establishment of work windows for the project requires the rerouting of the Railway's trains. Upon request, the Railway shall provide the State with documentation of any such additional costs incurred by the Railway, and payment shall be made to Railway within thirty (30) calendar days of the State's receipt of invoices. If the billing is disputed for any reason, the State will promptly notify the Railway and will pay any undisputed amount.

9. To require its contractor(s) to furnish the Railway, for approval, plans and calculations in PDF format of any shoring or cribbing proposed to be used over, under, or adjacent to the Railway's tracks, as well as plans for proposed falsework or demolition over Railway's property.

10. That, except as hereinafter otherwise provided, all work to be performed hereunder by State in the construction of the Project will be performed pursuant to a contract or contracts to be let by State. All such contracts shall provide and require:

    (a) That all work performed hereunder, within the limits of the Railway's right-of-way shall be performed in a good and workmanlike manner, and in accordance with plans and specifications approved by the Railway. Those changes or modifications during construction that affect safety or the Railway's operations shall also be subject to the Railway's approval.

    (b) That no work shall be commenced within Railway property until each of the contractors employed in connection with said work has (i) executed and delivered to the Railway the Contractor's Right of Entry Agreement in the form of Exhibit C, attached hereto and hereby made a part of this Agreement, and (ii) has obtained the Railway's approval of the insurance required by said Contractor's Right of Entry Agreement.

11. That the State's employees, agents, contractors, representatives and invitees shall (i) abide by and comply with the minimum safety requirements set forth in Exhibit C, and (ii) shall wear the current Railway standard for Personnel Protective Equipment ("PPE") when within the Railways' rail corridor. PPE shall meet applicable OSHA and ANSI specifications. Existing PPE requirements are: (i) safety glasses; permanently affixed side shields; no yellow lenses; (ii) high visibility hard hats; (iii) safety shoes with hardened toe, above the ankle lace up and a defined heel; and (iv) high visibility reflective orange vests. Hearing protection, fall protection and respirators will be worn as required by state and federal regulations.

12. Comply with all terms and conditions of Railway Permit No. 2176, including but not limited the removal of the permitted road, crossing and approaches upon termination of said Railway Permit; however, if the sale the Property from Railway to the State

previously described herein is completed prior to the termination of said Permit No. 2176, the State will not be required to remove the crossing and approaches within the Property until the Project is completed.

13. To advise the Railway, in writing, of the completion date of the Project within thirty (30) days after such completion and to notify the same, in writing, of the date on which State and/or its Contractor will meet with the Railway for the purpose of making final inspection of the Project.

ARTICLE IV

PERFORMANCE OF PROJECT WORK

1. All work contemplated in this agreement shall be performed in a good and workmanlike manner, in accordance with plans and specifications approved by the Railway. Any changes or modifications during construction that affect safety or operations of the Railway shall be subject to approval by the Railway prior to commencement of such changes or modifications.

2. The State and Railway shall, to the extent reasonably practicable, adhere to the construction schedule for all Project work. The Parties agree that the Railway's failure to complete Railway Work in accordance with the construction schedule by reason of inclement weather, unforeseen railroad emergencies, or other conditions beyond its reasonable control, will not constitute a breach of this Agreement by the Railway nor subject the Railway to any liability or responsibility for added expense to the State.

3. In the event of an unforeseen railroad emergency and regardless of the requirements of the construction schedule, the Railway reserves the right to reallocate all or a portion of its labor forces assigned to perform the Railway Work when the Railway believes such reallocation is necessary to provide for the immediate restoration of railroad operations of the Railway or its affiliates or to protect persons or property on or near any property owned by the Railway. The Railway will reassign such labor forces to again perform the Railway Work when, in their good faith opinions, such emergency condition no longer exists. The Railway will not be liable for any additional costs or expenses of the Project resulting from any such reallocation of its labor forces. The Parties further agree that such reallocation of labor forces by the Railway and any direct or indirect results of such reallocation will not constitute a breach of this Agreement by the Railway.

4. The construction of said Project shall be performed and effected in such a manner as not to interfere with the safe and timely operation of locomotives, trains, cars and on-track maintenance equipment, over the Railway's tracks.

5. The Railway will have the right to stop construction work on the Project if any of the

following events take place: (i) State (or any of its contractors) performs the work in a manner contrary to the plans and specifications approved by the Railway; (ii) State (or any of its contractors), prosecutes the work in a manner which is hazardous to Railway personnel, property, facilities or the safe and expeditious movement of railroad traffic; or (iii) the insurance described in the attached Exhibit C is canceled prior to the completion of the Project or not obtained by the State's contractor. The work stoppage will continue until all necessary actions are taken by State to rectify the situation. Any such work stoppage under this provision will not give rise to any liability on the part of the Railway. In the event that the Railway desires to stop construction work on the Project, Railway agrees to immediately attempt to notify the following individual by telephone, and to notify the individual in writing:

Neal Uhlmeyer, P.E.
WSDOT Project Engineer
7912 Martin Way Ste E
Lacey, WA 98516
360-412-3421

6. The State shall supervise and inspect the operations of all State contractors to assure compliance with the plans and specifications and the terms of this Agreement. If it is determined by the Railway that the State's Contractor is not acting in accordance with these requirements and the Railway believes the situation is not being corrected in an expeditious manner, the Railway shall immediately notify the individual listed under section 5, above, so that the State can take appropriate corrective action.

7. The work for the Project shall not be commenced by the Railway until State has issued the Railway a written "Notice to Proceed." State's Contractor shall not commence construction of the Project within the Property until the State shall have given not less than thirty (30) days prior written notice to the Railway, which notice shall state the time that State's Contractor plans to begin construction of the Project within the Railway's property.

ARTICLE V

POST-PROJECT PROVISIONS

1. State will own and maintain, at its sole cost and expense, the State Highway Structures, including the highway approaches and appurtenances thereto, lighting, and all drainage associated with the structure ("Maintenance").

2. Except in the event of an emergency or for maintenance work within the limits of the deck of the any of the State Highway Structures, State shall notify the Railway and obtain prior authorization before entering on the Railway's property and/or easement rights, for maintenance, inspection, repair, or to perform alterations or modifications

to the State Highway Structures, which authorization shall not be unreasonably withheld or delayed. At the sole discretion of the Railway, the State and/or its contractor will be required to obtain a Right of Entry and comply with the Railway's Right of Entry requirements, as may be revised from time to time. State will be responsible for compliance by its contractor(s) to the extent that such compliance is not contrary to Washington State Law. In the event emergency repairs or inspections are deemed necessary by the State, the Railway shall be promptly notified so that railroad protective measures may be established to ensure the safety of State and Railway employees, equipment, and/or contractors necessary to evaluate and resolve any specific emergency concerns.

3. If the Railway determines in good faith that emergency maintenance work to the I-5 Bridge is needed for the immediate restoration of railroad operations or for the protection of persons or Railway property, such work may be performed by the Railway without prior approval of the State and the State agrees to reimburse the Railway for such emergency work, assuming the costs are reasonable and supported by adequate documentation. The State will be notified of the emergency work and the necessity for it at the Railway's earliest opportunity. The Railway shall maintain records regarding the emergency work performed and the costs incurred in accordance with generally accepted accounting principles and practices. Said records shall be made available to the State for audit upon request during normal business hours, for a period of three years after final payment is made to the Railway for the emergency maintenance work. Except for the emergency work as described above, no maintenance work will be performed on the I-5 Bridge by the Railway without prior written approval from the State.

4. The following activities or improvements are potentially hazardous or detrimental to the State Highway Structures and as such, are subject to the conditions stated below:

   (a) During the preliminary design phase of any improvements by the Railway that will be within 25-feet of the perimeter of any pier or footing of any of the State Highway Structures, the Railway shall provide improvement plans to the State for the purpose of reviewing said plans to establish any identifiable and material impacts to the State Highway Structures by the proposed Railway improvement;

   (b) With the exception of railroad ties, construction of any non-fire resistant improvement beneath the I-5 Bridge is prohibited;

   (c) No attachments, drilling or welding to any portion of the I-5 Bridge shall be permitted without the prior written approval of the State. Said approval by State shall not be unreasonably withheld or delayed;

   (d) Manufacture of flammable, explosive or hazardous materials under the I-5 Bridge is prohibited; and

(e) Storage of flammable liquids, explosives, or other hazardous materials under the State Highway Structures for any period of time greater than 48 hours is prohibited.

ARTICLE VI

NOTIFICATION

Any notice provided for or concerning this agreement shall be in writing and be deemed sufficiently given when sent by certified mail, return receipt requested, to the Parties at the following addresses:

Tacoma Rail

Alan Matheson, Manager, Mechanical and Construction
2601 SR 509 N. Frontage Road
Tacoma, Washington 98421
Phone: (253) 502-8934

Washington State Department of Transportation

Ahmer Nizam, Manager – Utilities/Railroad/Agreements
P.O. Box 47329
Olympia, WA. 98504-7329
Phone (360) 705-7271

ARTICLE VII

PAYMENT

1. The Railway may send to the State progress invoices detailing the costs of the Railway Work performed by the Railway under this Agreement. The State shall then pay progress invoices within thirty (30) days after receipt of said invoices. If the billing is disputed for any reason, the State will promptly notify the Railway and shall pay any undisputed amount.

2. A final and complete billing of all actual incurred costs and expenses, ascertained in accordance with the provisions of 23 CFR, subpart 1, sections 140.00 through 140.922, which by this reference is incorporated in this Agreement, shall be made at the earliest practical date. The State shall, upon presentation of final billing, reimburse the Railway for the cost of services and expenses of work included in this Agreement within sixty (60) calendar days. If the billing is disputed for any reason, the State will promptly notify the Railway and will pay any undisputed amount.

3. The Railway and the State shall maintain records regarding the work performed and the costs and expenses incurred by the Parties for the Project in accordance with generally accepted accounting principles and practices. Said records shall be made available to the other Parties, or for state, or federal audit, upon request during normal business hours, for a period of three years after the final payment.

ARTICLE VIII

INDEMNIFICATION

1. The State and its Contractors, as part of any contract for work to be performed on or about the Railway's right-of-way, shall indemnify and save harmless the Railway against and from any and all damage to or destruction of property whatsoever, or injury to or death of persons whomsoever arising from or as a result of work on the Project and maintenance of the State Highway Structure (hereinafter collectively "Claims"), which shall include but not be limited to interference with the normal movement of trains; whether such Claims are caused by or result from work performed by the State, its Contractors, or by the Railway doing work at the State's direction and expense. Should the State or its contractor's operations result in such claims, the State shall reimburse the Railway therefore.

2. Nothing in this Agreement is intended to be construed as a requirement for an indemnification against the sole negligence of the Railway, its officers, employees or agents. Moreover, for any work performed in the State of Washington, the State will require its contractor to indemnify the Railway and any other railroad company occupying or using the Railway's right-of-way and/or railroad tracks against all loss, liability and damages, including environmental damages, hazardous materials damage, penalties or fines that maybe assessed, caused by or resulting from the contractor's negligence, provided, however, if such loss, liability, damage, penalties or fines are caused by or result from the concurrent negligence of (a) the Railway or Railway's officers, employees, or agents, and (b) the State's contractor or the contractor's employees, agents or subcontractors, such indemnity shall be valid and enforceable only to the extent of the negligence of the State's contractor or the contractor's employees, agents or subcontractors.

   Likewise, if any claims, demands, suits at law or equity, actions, penalties, losses, damages or costs of whatever kind or nature are caused by or result from the concurrent negligence of (a) the Railway or the Railway's officers, employees or agents and (b) the State's officers, employees or agents, the indemnity provided in this Agreement shall be valid and enforceable only to the extent of the negligence of the State's officers, employees, or agents.

3. State hereby waives immunity under Title 51 RCW, Industrial Insurance Laws and affirms that the Railway and State have specifically negotiated this provision, as required by RCW 4.24.115.

4. The State agrees that the covenants and representations relating to the indemnification provided in this Article VIII above shall survive the term of this Agreement and continue in full force and effect.

ARTICLE IX

ORIGINAL AGREEMENT

1. Railway is a successor in interest to the Chicago, Milwaukee, St. Paul and Pacific Railroad Company. The Original Agreement is attached hereto as Exhibit D and made a part of this Agreement which supplements said Original Agreement. Those terms and conditions of the Original Agreement that are not modified and/or superseded by the terms of this Agreement shall remain unmodified and in full force and effect. In the event of a conflict between the terms and conditions of this Agreement and those of the Original Agreement, the terms and conditions of this Agreement shall control.

ARTICLE X

MISCELLANEOUS PROVISIONS

1. All the covenants and provisions of this Agreement shall be binding upon and inure to the benefit of the successors and assigns of the Parties hereto, except that no party may assign any of its rights or obligations hereunder without the prior written consent of the other party.

2. No modification or amendment to this Agreement shall be valid until the same is reduced to writing and executed with the same formalities as were attendant to this Agreement.

3. The State and the Railway mutually agree that any dispute between the Parties arising from the terms of the Agreement shall be resolved through mandatory and binding arbitration. The arbitration shall be administrated by a single arbitrator who will be selected by the Parties. Further, the decision of the arbitrator and the specific basis for the decision shall be in writing. The arbitrator shall use this this Agreement as the basis for decisions.

4. In the event any party deems it necessary to institute legal action or proceedings to enforce any right or obligation under this Agreement, the Parties hereto agree that any such action or proceedings shall be brought in a state court of competent jurisdiction situated in Pierce County, Washington or in United States District Court for the Western District of Washington, located in Pierce County, Washington.

5. To the maximum extent possible, each provision of this Agreement will be interpreted in such a manner as to be effective and valid under applicable law. If any provision of this Agreement is prohibited by, or held to be invalid under, applicable

law, such provision will be ineffective solely to the extent of such prohibition or invalidity and the remainder of the provision will be enforceable.

IN WITNESS WHEREOF, State has caused this Agreement to be executed and witnessed by its duly qualified and authorized officials, and City of Tacoma has executed this Agreement, both as of the day and year first above written.

City of Tacoma,
Public Works Department

Kurtis D. Kingsolver, P.E.
Interim P.W. Director/City Engineer

Date: 7/22/13

Dale King,
Tacoma Rail Superintendent

Date: 7/15/13

APPROVED:

Kyle Kellem,
Tacoma Rail Roadmaster

Date: 7-15-13

APPROVED AS TO FORM:

Michael W. Smith,
Deputy City Attorney

Date: 7/9/13

Washington State
Department of Transportation

Ahmer Nizam,
Manager – Utilities and Railroads

Date: July 1, 2013

Assistant Attorney General

Date: _____

law, such provision will be ineffective solely to the extent of such prohibition or invalidity and the remainder of the provision will be enforceable.

IN WITNESS WHEREOF, State has caused this Agreement to be executed and witnessed by its duly qualified and authorized officials, and City of Tacoma has executed this Agreement, both as of the day and year first above written.

City of Tacoma,
Public Works Department

_____
Kurtis Kingsolver,
Public Works Director

Date: _____

Washington State
Department of Transportation

_____
Ahmer Nizam,
Manager – Utilities and Railroads

Date: _____

APPROVED:

_____
Kyle Kellem,
Tacoma Rail Roadmaster

Date: _____

APPROVED AS TO FORM:

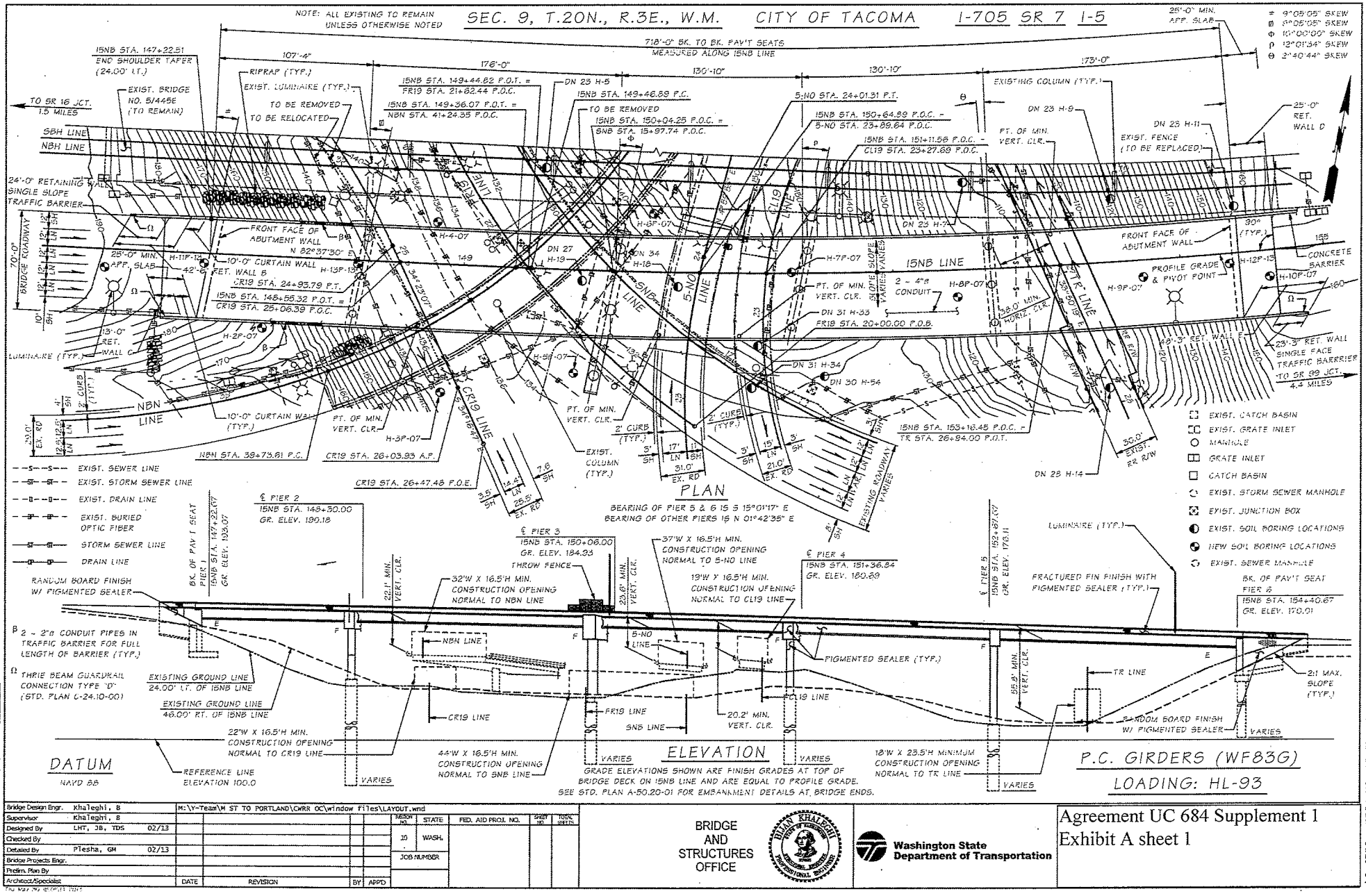
_____
Michael W. Smith,
Deputy City Attorney

Date: _____

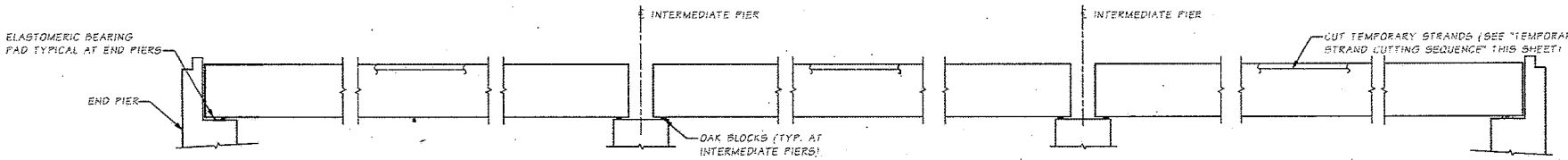
J. W. Allin
Assistant Attorney General

Date: June 24, 2013

Attached as record of AGO approval as to form

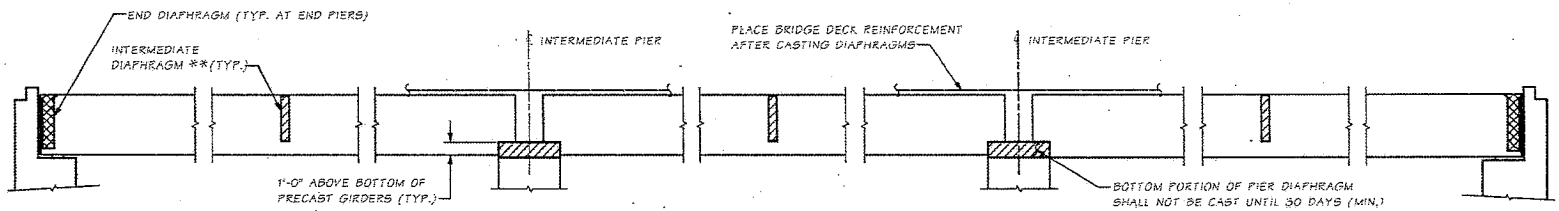

NOTE: ALL EXISTING TO REMAIN UNLESS OTHERWISE NOTED
SEC. 9, T.20N., R.3E., W.M. CITY OF TACOMA I-705 SR 7 I-5
PLAN
ELEVATION
DATUM
NAVD 88
P.C. GIRDERS (WF83G)
LOADING: HL-93
BRIDGE AND STRUCTURES OFFICE
Washington State Department of Transportation
Agreement UC 684 Supplement 1
Exhibit A sheet 1

APPENDIX G



STAGE 1

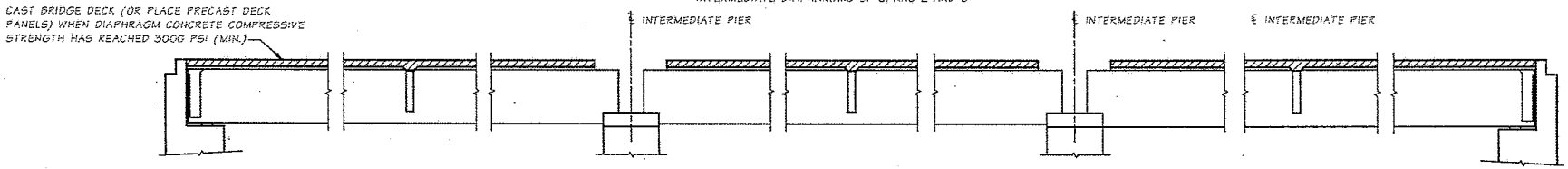
SET GIRDERS IN PLACE



STAGE 2

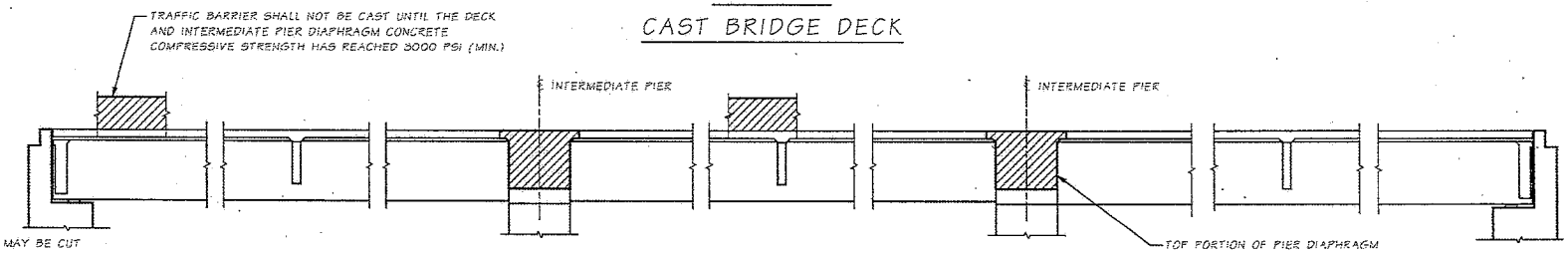
CAST DIAPHRAGMS AND PLACE BRIDGE DECK REINFORCEMENT

** SEE POSTENSIONING SEQUENCE FOR CONSTRUCTING THE INTERMEDIATE DIAPHRAGMS OF SPANS 2 AND 3



STAGE 3

CAST BRIDGE DECK



STAGE 4

COMPLETE DIAPHRAGMS & CAST TRAFFIC BARRIER

TEMPORARY STRAND CUTTING SEQUENCE

1. ERECT AND BRACE GIRDERS.
2. REMOVE EXPANDED POLYSTYRENE IN 2" x 6" RECESSES IN TOP FLANGE OF GIRDERS.
3. CUT STRANDS IN 2" x 6" RECESSES. STRANDS MAY BE CUT BY USING A CUTTING TORCH AND MOVING THE FLAME BACK AND FORTH OVER THE LENGTH OF EXPOSED STRAND TO LET INDIVIDUAL WIRES BREAK ONE AT A TIME TO LESSEN THE SHOCK TO THE GIRDER. STRANDS SHALL BE RELEASED IN A SYMMETRICAL MANNER AROUND THE GIRDER CENTERLINE STARTING WITH THOSE NEAREST THE CENTERLINE AND WORKING OUTWARDS.
4. REMOVE ALL MOISTURE IN RECESS PRIOR TO FILLING RECESS WITH GROUT.

NOTE:

NO LIVE LOAD SHALL BE ALLOWED ON THE SPANS UNTIL THE COMPRESSIVE STRENGTH OF THE TOP PORTION OF THE PIER DIAPHRAGM HAS REACHED 3000 PSI (MIN.).

CONSTRUCTION SEQUENCE ~ SUPERSTRUCTURE

SHEET SR4

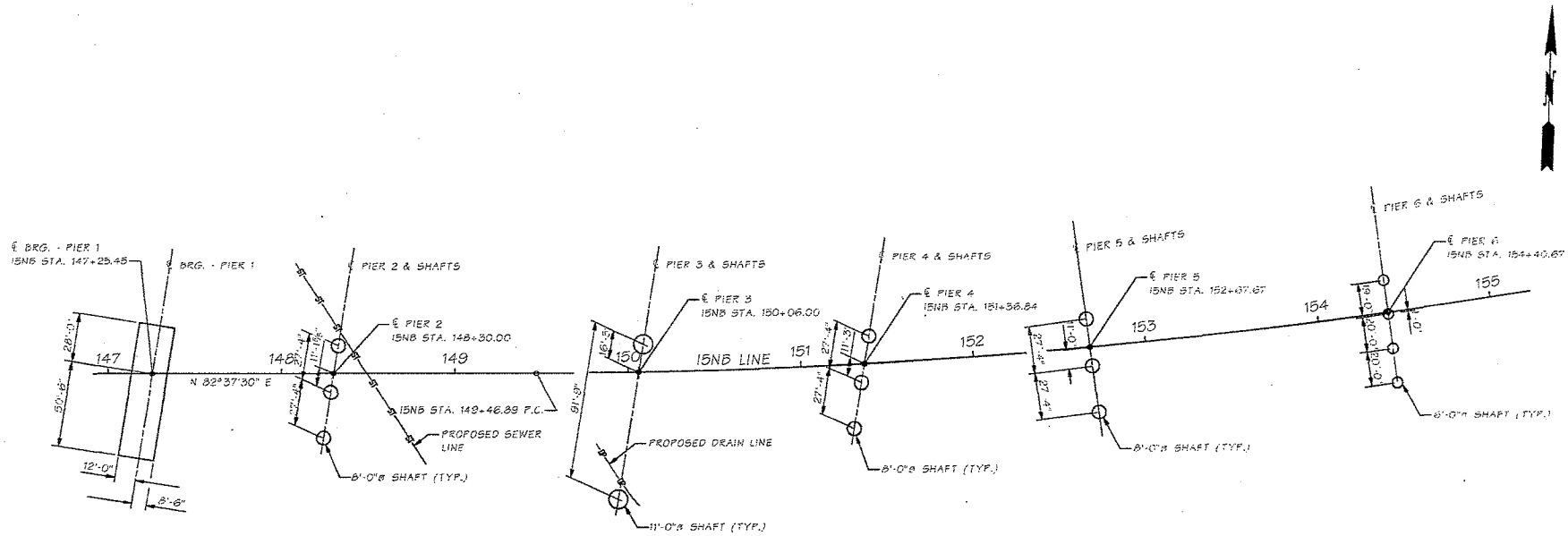
FILE NO. SR 5

Bridge Design Engr.	Khaleghi, B	M:\Y-Team\M ST TO PORTLAND\CWRR OC\window files\CONSTR SEQUENCE.wnd			REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	Khaleghi, B				10	WASH.			
Designed By									
Checked By									
Detailed By	Plesha, GM 01/13				JOB NUMBER				
Bridge Projects Engr.									
Prelim. Plan By									
Architect/Specialist		DATE	REVISION	BY	APP'D				

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

Agreement UC 684 Supplement 1
Exhibit A sheet 2



FOUNDATION PLAN

BEARING OF PIERS 1, 2, 3, & 4 IS N 01°42'55" E
PIERS 5 IS N 15°01'17" W
PIER 6 IS NORMAL TO 15NB LINE

SR 5 FILE NO. _____ SHEET 3 of 10

Bridge Design Engr.	khaleghi, B	M:\Y-Team\M ST TO PORTLAND\CWRR OC\window files\FOUNDATION PLAN.wnd					REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor	khaleghi, B						10	WASH.			
Designed By	JB/LHT/TDS 04/13						JOB NUMBER				
Checked By											
Detailed By	Plesha, GM 01/13										
Bridge Projects Engr.											
Prelim. Plan By											
Architect/Specialist		DATE	REVISION	BY	APPD						

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

Agreement UC 684 Supplement 1
Exhibit A sheet 3

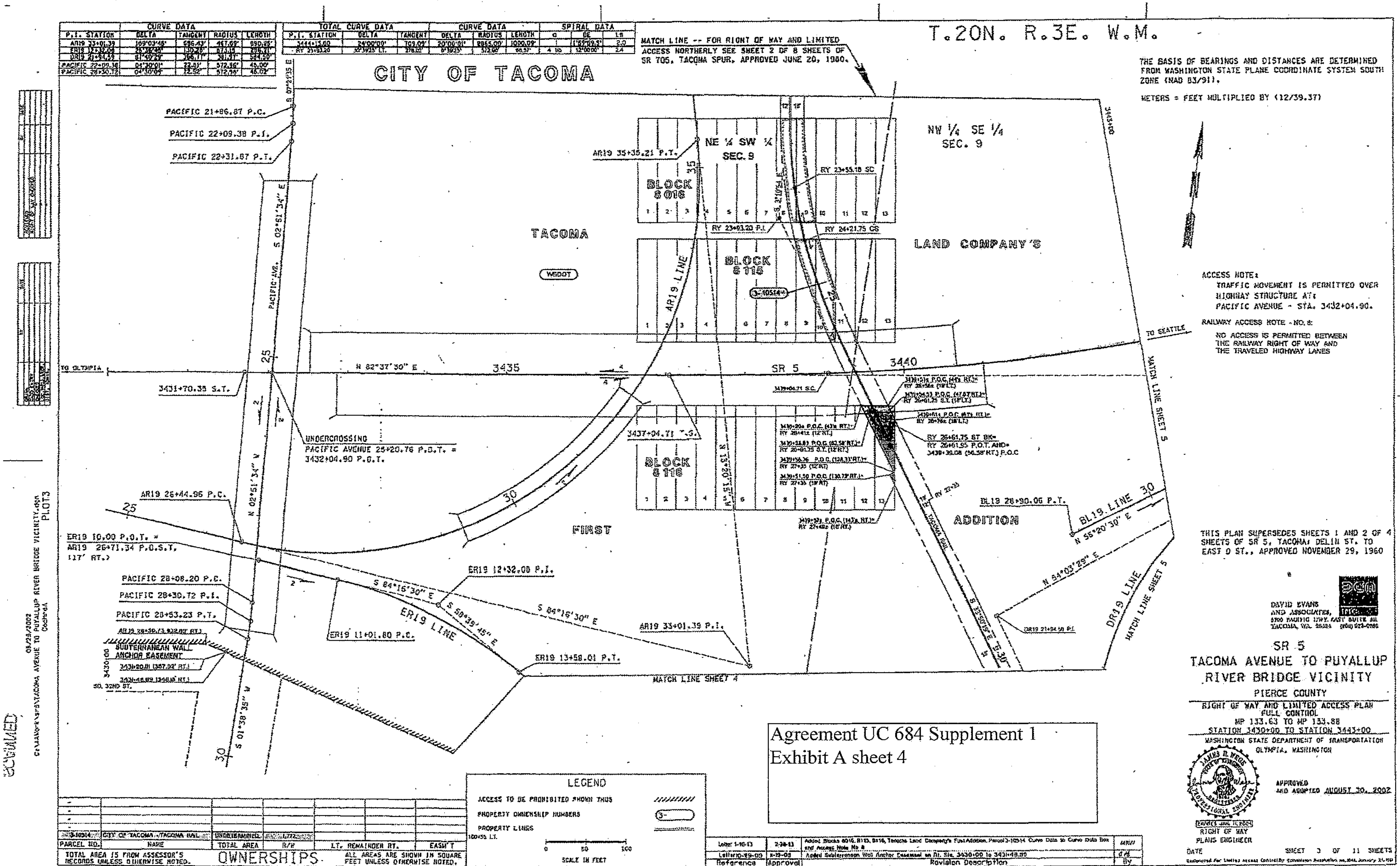

T.20N. R.3E. W.M.
CITY OF TACOMA
MATCH LINE -- FOR RIGHT OF WAY AND LIMITED ACCESS NORTHERLY SEE SHEET 2 OF 8 SHEETS OF SR 705, TACOMA SPUR, APPROVED JUNE 20, 1980.
THE BASIS OF BEARINGS AND DISTANCES ARE DETERMINED FROM WASHINGTON STATE PLANE COORDINATE SYSTEM SOUTH ZONE (NAD 83/91).
METERS = FEET MULTIPLIED BY (12/39.37)
NE 1/4 SW 1/4 SEC. 9
NW 1/4 SE 1/4 SEC. 9
BLOCK 8016
BLOCK 8115
BLOCK 8116
TACOMA
LAND COMPANY'S
FIRST
ADDITION
WSDOT
ACCESS NOTE:
TRAFFIC MOVEMENT IS PERMITTED OVER HIGHWAY STRUCTURE AT:
PACIFIC AVENUE - STA. 3432+04.90.
RAILWAY ACCESS NOTE - NO. 8:
NO ACCESS IS PERMITTED BETWEEN THE RAILWAY RIGHT OF WAY AND THE TRAVELED HIGHWAY LANES
TO SEATTLE
TO OLYMPIA
SR 5
3435
3440
N 82°37'30" E
PACIFIC 21+86.87 P.C.
PACIFIC 22+09.38 P.I.
PACIFIC 22+31.87 P.T.
AR19 35+35.21 P.T.
AR19 LINE
RY 23+55.18 SC
RY 23+93.20 P.I.
RY 24+21.75 CS
3431+70.35 S.T.
UNDERCROSSING
PACIFIC AVENUE 25+20.76 P.O.T. = 3432+04.90 P.O.T.
3437+04.71 T.S.
AR19 26+44.96 P.C.
ER19 10.00 P.O.T. = AR19 26+71.34 P.O.S.T. (17' RT.)
PACIFIC 28+08.20 P.C.
PACIFIC 28+30.72 P.I.
PACIFIC 28+53.23 P.T.
SUBTERRANEAN WALL ANCHOR EASEMENT
SO. 32ND ST.
N 02°51'34" W
S 02°51'34" E
S 01°38'35" W
PACIFIC AVE.
S 84°16'30" E
S 50°39'45" E
ER19 LINE
ER19 12+32.00 P.I.
ER19 11+01.80 P.C.
ER19 13+58.01 P.T.
AR19 33+01.39 P.I.
MATCH LINE SHEET 4
MATCH LINE SHEET 5
N 13°20'15" W
TACOMA RAIL
RY 26+61.75 ST BK=
RY 26+61.55 P.O.T. AHD=
BL19 28+90.06 P.T.
BL19 LINE
N 55°20'30" E
N 64°03'29" E
DR19 LINE
THIS PLAN SUPERSEDES SHEETS 1 AND 2 OF 4 SHEETS OF SR 5, TACOMA: DELIN ST. TO EAST D ST., APPROVED NOVEMBER 29, 1960
DAVID EVANS AND ASSOCIATES, INC.
SR 5
TACOMA AVENUE TO PUYALLUP RIVER BRIDGE VICINITY
PIERCE COUNTY
RIGHT OF WAY AND LIMITED ACCESS PLAN
FULL CONTROL
MP 133.63 TO MP 133.88
STATION 3430+00 TO STATION 3443+00
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
OLYMPIA, WASHINGTON
APPROVED AND ADOPTED AUGUST 30, 2002
RIGHT OF WAY PLANS ENGINEER
SHEET 3 OF 11 SHEETS
Agreement UC 684 Supplement 1
Exhibit A sheet 4
LEGEND
ACCESS TO BE PROHIBITED SHOWN THUS
PROPERTY OWNERSHIP NUMBERS
PROPERTY LINES
SCALE IN FEET
CITY OF TACOMA - TACOMA RAIL
PARCEL NO.
NAME
TOTAL AREA
R/W
LT. REMAINDER RT.
EASM'T
TOTAL AREA IS FROM ASSESSOR'S RECORDS UNLESS OTHERWISE NOTED.
OWNERSHIPS
ALL AREAS ARE SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED.
Reference
Approval
Revision Description
By
PLOT3

Exhibit B
Tacoma Railroad Flagging

Estimate of Cost (Based on State's Estimate of Work)

Description	Days of Work	Rate	Total Cost
Tacoma Railroad Flaggers	120	$650	$78,000
Total			**$78,000**

EXHIBIT C – PAGE 1
CONTRACTOR'S
RIGHT OF ENTRY AGREEMENT
FOR CONSTRUCTION PROJECTS ON OR ADJACENT TO PROPERTY OF CITY OF TACOMA - TACOMA RAIL

This Right of Entry Agreement ("Agreement") is entered into effective as of this ____ day of _____2013, by and between "Company Name" ("Contractor"),.a _____, whose address is: _____ and CITY OF TACOMA, DEPARTMENT OF PUBLIC WORKS, - MOUNTAIN DIVISION ("Railway"), whose address is: 3628 South 35th St., Tacoma, WA 98409.

Contractor has entered into a Contract dated _____, 2013, with the State of Washington, through its Department of Transportation ("STATE") for the performance of certain work in connection with the project – "Interstate 5 – M Street to Portland Avenue Project"- in the performance of which work the Contractor will necessarily be required to conduct operations within the Railway right of way and property ("Railway Property"). The Contract provides that no work shall be commenced within Railway Property until the Contractor employed in connection with said work for the State executes and delivers to Railway an Agreement, in the form hereof, and shall have provided insurance of the coverage and limits specified in said Contract and Section 2 of this Agreement. If this Agreement is executed by someone other than the Owner, General Partner, President or Vice President of Contractor, evidence will be furnished to the Railway certifying that the signatory is empowered to execute this Agreement for the Contractor.

Accordingly, as consideration of Railway granting permission to Contractor to enter upon Railway Property and Contractor's payment to the City of Tacoma of ONE THOUSAND FIVE HUNDRED DOLLARS and NO CENTS ($1,500.00), Contractor and Railway herein agree as follows:

SECTION 1. RELEASE OF LIABILITY AND INDEMNITY

Contractor shall indemnify and hold Railway and its agents, employees and/or officers harmless from and shall process and defend at its own expense any and all claims, demands, suits at law or equity, actions, penalties, losses, damages or costs, of whatever kind or nature, brought against Railway arising in any manner from the Contractor's or any of Contractor's subcontractors' acts or omissions or failure to perform any obligations hereunder, which shall include but not be limited to interference with the normal movement of trains. . Contractor further agrees to defend the Railway in any litigation, including payment of any costs or attorney's fees, for any claims or actions commenced, arising out of or in connection with acts or activities authorized by this Agreement; Provided, however, **if such claims, demands, suits, at law or equity, actions, penalties, losses, damages or costs are caused by or result from the concurrent negligence of (a) the Contractor or any of its subcontractors and (b) Railway and its agents, employees and/or officers, this indemnity provision shall be valid and enforceable only to the extent of the negligence of the Contractor or any of its subcontractors and provided further** that nothing herein shall require the Contractor to hold harmless or defend Railway, its agents, employees and/or officers from any claims, demands, suits at law or equity, actions, penalties, losses, damages or costs arising from the sole negligence of Railway or its agents, employees and/or officers.

To the fullest extent permitted by law, Contractor further agrees to indemnify, and hold harmless the Railway against and assume the defense of any liabilities asserted against or suffered by the Railway under or related to the Federal Employees Liability Act ("FELA") whenever employees of the Contractor or any of its agents, invitees, or subcontractors claim or allege that they are employees of the Railway or otherwise. This indemnity shall also extend, on the same basis, to FELA claims based on actual or alleged violations of any Federal, State or local laws or regulations, but not limited to, the Safety Appliance Act, the Boiler Inspection Act, the Occupational Health and Safety Act, the Resource Conservation and Recovery Act, and any similar State or Federal statute.

SECTION 2. INSURANCE.

Before commencing any work under this Agreement, Contractor must provide and maintain in effect throughout the term of this Agreement insurance, at Contractor's expense, covering all of the work and services to be performed hereunder by Contractor and each of its subcontractors, as described below:

(a) During the course of all construction contemplated by this Agreement, Contractor shall obtain and keep in force at its own expense, RAILROAD PROTECTIVE LIABILTY COVERAGE FORM (ISO CG 00 35 06 90 or later), naming Contractor and City of Tacoma as the insured. Said policy shall be of policy limits of no less than $2,000,000.00 (Two Million Dollars) combined single limit of liability per occurrence with a general aggregate limit of $6,000,000.00 (Six Million Dollars), providing coverage for claims of bodily injury and property damage, and physical damage, arising from the Contractor's work or work performed on its behalf.

(b) Contractor shall maintain Commercial General Liability insurance. This insurance must contain broad form contractual liability coverage with a combined single limit of a minimum of $2,000,000 each occurrence and an aggregate limit of at least $6,000,000. Coverage must be purchased on a post 1998 ISO occurrence form or equivalent and include coverage for, but not limit to the following:

- Bodily Injury and Property Damage
- Personal Injury and Advertising Injury
- Fire legal liability
- Products and completed operations

(c) Contractor shall maintain WORKERS' COMPENSATION insurance to comply with statutory limits for all employees, and in the case any work is sublet, Contractor shall require its contractors and subcontractors similarly to provide workers' compensation insurance for all the latter's employees. Contractor shall also maintain, during the life of this policy, employer's liability "stop gap" insurance. The following minimum limits must be maintained:

Workers' Compensation	Statutory
Employer's Liability	$ 1,000,000 per occurrence

(d) Contractor shall maintain BUSINESS AUTOMOBILE INSURANCE coverage in an amount of at least $1,000,000 per occurrence combined single limit of liability per occurrence and in aggregate, and include coverage for, but not limited to the following: (1) Bodily injury and property damage; and (2) Any and all vehicles owned, used or hired.

(e) The Commercial General Liability insurance required pursuant to this Agreement shall be written on an occurrence basis, with an aggregate limit location endorsement for the construction site, and shall provide liability coverage for any and all Loss or Damage. Such insurance shall include blanket contractual coverage, including coverage for this Agreement as now or hereafter amended and specific coverage for the indemnity provisions set forth herein as now or hereafter amended.

(f) Each insurance policy required by this Agreement shall be primary as respects any coverage maintained by City of Tacoma and shall include an endorsement reflecting the same. Any other coverage maintained by City of Tacoma shall be excess of this coverage herein defined as primary and shall not contribute with it. Each insurance policy obtained pursuant to this Agreement shall be endorsed to state that coverage shall not be suspended, voided, canceled, or amended except after 30 days prior written notice of such has been given to City of Tacoma. Each insurance policy obtained pursuant to this Agreement herein shall be issued by financially sound insurers who may lawfully do business in the state of Washington with a financial rating at all times during coverage of no less than an "A IX" in the latest edition of "Best's Key Rating Guide" published by A.M. Best Company. In the event that at any time during Contractor's work, the insurer does not meet

the foregoing standards, Contractor shall give prompt notice to City and shall seek coverage from an insurer that meets the foregoing standards.

(g) Contractor will provide certificates of insurance evidencing the policies and coverage set forth above prior to the commencement of any work and annually thereafter, prior to expiration of the coverage. Upon reasonable advance written notice to Contractor by City of Tacoma, Contractor shall permit City of Tacoma to inspect and copy the policies. The insurance coverage required by this Right of Entry shall not be subject to a self-insured retained limit or deductible. Contractor shall not cause its policies to be cancelled or permit them to lapse. Insurance policies required

pursuant to this section herein shall have no non-standard exclusions unless approved by Tacoma City's Risk Manager or designee.

(h) All policies of insurance required by this Agreement shall specifically name City as an additional named insured without limitation, pursuant to an endorsement approved of by City's Risk Manager or designee.

(i) In the event that any insurance coverage shall lapse, be cancelled, voided, or terminated, Contractor shall cease all work on Railway Property until such time that equivalent or better insurance coverage is put in place and evidence thereof is provided to City.

(j) The Parties hereby waive subrogation rights against each other, and agree to require their respective insurers to waive subrogation rights against the other party and such other party's insurers, to the extent any liability for property damage, bodily injury (including death), or other loss may be covered by the proceeds of insurance. All insurance policies and coverages shall be subject to review by City of Tacoma for adequacy of coverage and policy form. All waivers referred to in this paragraph apply only to the extent permitted by the laws of the state Washington.

(k) The fact that insurance is obtained by Contractor will not be deemed to release or diminish the liability of Contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railway will not be limited by the amount of the required insurance coverage.

Certificates shall be sent to: City of Tacoma dba Tacoma Rail
c/o Real Property Services
3628 South 35th Street
Tacoma, Washington 98409

SECTION 3. CONTRACTOR REQUIREMENTS

(a). While on or about Railway Property, Contractor shall fully comply with Railway's Contractor Requirements, below, including (but not limited to) work zone protective and clearance requirements and personal protective equipment requirements. Contractor shall be responsible for fully informing itself as to Railway "Contractor Requirements".

(b). Prior to entering Railway Property, each person providing labor, material, supervision, or services connected with the work to be performed on or about Railway Property shall register as a contractor at Railway's Contractor Safety Training section of its website at www.tacomarail.com, attend and complete a Safety Orientation session on line at www.contractorsorientation.com, and agree to abide by all applicable safety regulations and rules.

(c). Prior to entering Railway property, the Contractor shall prepare and implement a safety action plan acceptable to Railway. Contractor shall audit its compliance with that plan during the course of its

work. A copy of said plan and audit results shall be kept at the work site and shall be available for inspection by Railway at all reasonable times.

(d). Prior to entering Railway property, the Contractor shall notify the appropriate Railway representative, in writing, at least 30 calendar days in advance of initially commencing work on the Railway's property.

(e). Prior to entering Railway property, the Contractor shall furnish to the Railway, for approval, electronic copies of plans and calculations of any shoring or cribbing proposed to be used over, under, or adjacent to the Railway's tracks, as well as plans for proposed falsework or demolition over Railway's property. The Railway anticipates that comments on each submittal will be provided within 45 calendar days of receipt of said submittal by the Railway.

(f). The Contractor agrees that all work performed hereunder, within the limits of the Railway's right of way shall be performed in a good and workmanlike manner, and in accordance with plans and specifications approved by the Railway. Those changes or modifications during construction that affect safety or the Railway's operations shall also be subject to the Railway's approval. The Railway anticipates that comments on each submittal will be provided within 45 calendar days of receipt of said submittal by the Railway.

(g). When not in use, Contractor's machinery and materials must be kept at least twenty-five (25) feet from the centerline of Railway's nearest track. Contractor must not cross Railway's tracks except at existing open public crossings, without prior written approval.

SECTION 4. PROTECTION OF RAILWAY FACILITIES AND FLAGGER SERVICES

(a). The Contractor shall give a minimum of at least (5) working days notice to Tacoma Rail's Roadmaster at telephone (253) 377-3554, in advance of when flagging services will be required.

(b). Tacoma Rail flagger and protective services and devices will be required and furnished, pursuance to Section 4(c) below, including, but not limited to, for the following conditions:

(1). When Contractor's work activities are located over or under and within twenty-five (25) feet measured horizontally from center line of the nearest track.

(2). When cranes or similar equipment positioned outside of 25-foot horizontally from track center line that could foul the track in the event of tip over or other catastrophic occurrence.

(3). When in the opinion of Tacoma Rail's representative, it is necessary to safeguard Railway's Property, employees, agents, trains, engines and facilities.

(4). When any excavation, without vertical limitation, is performed below the bottom of tie elevation, if, in the opinion of Tacoma Rail's representative, track(s) or other Railway facilities may be subject to movement or settlement.

(5). When work in any way interferes with the safe operation of trains at speeds allowed by track classification.

(6). When any hazard is presented to Railway track, communications, signal, electrical, or other facilities either due to persons, materials, equipment or blasting within twenty-five (25) feet..

(7). Special permission must be obtained from Tacoma Rail before moving heavy or cumbersome objects or equipment which might result in making the track impassable.

(c). Flagging services will be performed by qualified Tacoma Rail flaggers. The base cost per day for (1) flagger is $650.00 which includes vacation allowance, paid holidays, and Unemployment Insurance, Public Liability and Property Damage Insurance, health and welfare benefits, transportation, meals, lodging and supervision, for an eight (8) hour basic day. Overtime and work during holidays will be billed at a rate of $100 per hour. These rates are subject to any increases which may result from Employee- Management negotiations or which may be authorized by Federal authorities. State/Contractor will be billed on actual costs in effect at time work is performed.

(1). A flagging crew generally consists of one employee. However, additional personnel may be required to protect Tacoma Rail Property or personnel.

(2). Each time a flagger is called, the minimum period for billing shall be the eight (8) hour basic day.

(3). The cost of flagger services provided by Tacoma Rail, when deemed necessary by Tacoma Rail's representative, will be borne by the State/Contractor.

SECTION 5: GENERAL PROVISIONS

(a) This Agreement may be changed, modified, amended, or waived only by written agreement executed by the Parties hereto.

(b) In the event either party deems it necessary to institute legal action or proceedings to enforce any right or obligation under this agreement, the Parties hereto agree that any such action or proceedings shall be brought in a State court of competent jurisdiction situated in Pierce County, Washington or in United States District Court for the Western District of Washington. This Agreement shall be interpreted in accordance with the laws of the State of Washington, unless such laws, rules, and regulations are preempted by applicable federal laws, rules, and regulations.

(c) If any provision of the Agreement or any provision of any document incorporated by reference shall be held invalid, such invalidity shall not affect the other provisions of this Agreement which can be given effect without the invalid provision, if such remainder conforms to the requirements of applicable law and the fundamental purpose of the Agreement, and to this end the provisions of this Agreement are declared to be severable.

SIGNATURES ON THE FOLLOWING PAGE

EXHIBIT C – PAGE 6

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed as of the day and year first written above.

CITY OF TACOMA,
Public Works Department

Kurtis D. Kingsolver, P.E.
Interim P.W. Director/City Engineer

Dale King
Tacoma Rail Superintendent

APPROVED:

Kyle Kellem,
Tacoma Rail Roadmaster

APPROVED AS TO FORM:

Michael W. Smith
Deputy City Attorney

"COMPANY NAME"
CONTRACTOR:

By: _____

Title: _____

Date: _____

5/15/63 6/20/

UC 684 Supplement 1
Exhibit D
Original Agreement

Cont. 10,020
UC 684
HWY

V-1524

Control Section

THIS AGREEMENT, made and entered into this 12th day of August, 1963, by and between the CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD COMPANY, a Wisconsin corporation, hereinafter called the "Railroad," and the STATE OF WASHINGTON, herein represented by and acting through its Director of Highways, hereinafter called the "State,"

W I T N E S S E T H :

WHEREAS, the State proposes to construct Primary State Highway No. 1 over and across the Railroad's Tacoma and Eastern line necessitating the relocation of a portion of said railroad line in Tacoma Eastern Gulch between East 29th and East 36th in the City of Tacoma, Washington, and the relocation and reconstruction of Primary State Highway No. 5, said Primary State Highway No. 1 to cross said line of railroad on dual overhead highway bridges and Primary State Highway No. 5 on a single overhead highway bridge, each to have certain off and on access ramps also crossing over the said line of railroad on overhead highway bridges, all as shown on map numbered 9001 dated June 20, 1962, marked "Exhibit A," attached hereto and made a part hereof; and

WHEREAS, the Railroad will receive no benefit from such construction and the State is willing to undertake the construction of said project entirely with state funds and such federal funds as are available for such purposes; and

WHEREAS, the parties by separate instrument or instruments have or will provide for the exchange of necessary right of way for the relocated railroad line and the highway encroachments to be placed thereon and upon the present right of way of the Railroad on which its tracks are to remain after construction is complete, it being the intent of the parties to herein provide for the construction, maintenance and use of the railroad-highway facilities covered by this agreement;

NOW, THEREFORE, in consideration of the premises and the mutually dependent promises hereinafter contained, the parties agree as follows:

I.

A. The State or its contractor or contractors shall at State expense and without cost to the Railroad perform all work and furnish all material necessary to:

(1) Construct track grade and lay sub-ballast for relocated line of railroad between railroad engineer stations 21+15.18 and 48+13.00 which latter station is equal to railroad engineer station 53+61.30 of the existing alignment as shown in dashed red and yellow lines with the engineer stations thereof shown in washed yellow on said Exhibit A, said track grade not to exceed 3.3382 percent which grade will obtain between beginning and end of relocation.

(2) Erect all necessary retaining walls along the Railroad's track as relocated, said retaining walls to be located approximately as shown in cross-hatched red with the engineer stations thereof shown in washed orange and on the profile thereof on said Exhibit A.

(3) Construct, reconstruct and relocate 72 inch storm and 24 and 48 inch sanitary sewer lines and connecting lines necessitated by said highway project and the relocation of the said railroad line, whether or not within the present or proposed right of way of the Railroad, said storm and sanitary sewer lines to cross under the Railroad's tracks and roadbed as relocated at the locations shown by the respectively identified dashed blue lines on said Exhibit A.

UC 684

(4) construct 30 inch storm sewer and catch basins along relocated roadbed and track from East 36th Street to East 31st Street as shown in dashed red and black line on said Exhibit A, so as to adequately drain said railroad track and roadbed between retaining walls.

(5) Construct dual highway bridges for Primary State Highway No. 1 and single highway bridge for Primary State Highway No. 5 over and across the track and roadbed of the Railroad as relocated, the centerline of said Primary State Highway No. 1 to intersect the relocated railroad track at railroad engineer station 25+96.72, and the centerline of said Primary State Highway No. 5 to intersect the relocated railroad track at railroad engineer station 38+51.17, and construct on and off ramps designated BL 19, CL 19 and DL 19, the centerlines thereof crossing on single highway bridges over the Railroad's relocated tracks and roadbed at railroad engineer stations 28+76.74, 24+67.35 and 19+29.02, respectively.

(6) Furnish and install posts, clevises, insulators and chain link fence in accordance with drawing thereof dated March (no date), 1962, revised May 24, 1963, prepared by the State and by this reference made a part hereof, except that provision shall be made for installation thereon of circuit protection wire at intervals of one, three and five feet above top of retaining walls for detection of obstructions falling or rolling down slopes endangering railroad operations.

(7) Furnish and install brackets and anchor bolts on the proposed retaining walls for fastening communication cables and poles of the Railroad thereto, said brackets and anchor belts to be spaced not more than 50 feet apart on curved walls and not more than 150 feet apart on tangent walls.

(8) Complete the entire project of the State affecting the Railroad at this location which is not herein specifically provided to be done by the Railroad.

B. The Railroad shall at the State's expense perform all work and furnish all material necessary to:

(1) Provide communication facilities to accommodate flagmen and to provide flagging service estimated to cost $8,114.00, as detailed on Exhibit "B" attached hereto and made a part hereof.

(2) Relocate the Railroad's existing communication and signal line to brackets or poles as necessary along the relocated track and to provide circuit protection wires on posts erected by the State, at an estimated cost of $6,204.00 as detailed on Exhibit "C" attached hereto and made a part hereof.

(3) Provide circuit protection wires and appurtenant facilities on posts erected by the State on proposed retaining walls at an estimated cost of $4473.00, as detailed on Exhibit "CC" attached hereto and made a part hereof.

(4) Lay and ballast approximately 2400 feet of track on said grade and sub-ballast for relocated line to be constructed by the State or its contractor or contractors, and connect the same to form new alignment of track, and upon completion thereof and commencement of railroad operations thereover to remove existing track replaced by relocated line, at the estimated cost of $25,235.00, as detailed on Exhibit "D" attached hereto and made a part hereof.

C. All work herein agreed to be done and all materials to be furnished by the State, its contractor or contractors, insofar as the construction here involved is concerned, shall be in accordance with detail plans and specifications prepared by the State and approved by the Railroad, which by this reference are made a part hereof.

VC 684

II.

The State shall construct said highway bridges and retaining walls over the roadbed and tracks of the Railroad as relocated with minimum vertical clearances of not less than 23 feet above top of rail and with minimum horizontal clearances of not less than 12 feet. During construction said clearances shall be maintained in accordance with the provisions of said Exhibit B.

III.

Upon completion of the work herein to be done by the parties or their contractors, agents and employees and upon the acceptance thereof and commencement of railroad operations thereover the roadbed and track of the relocated line shall be and become the property of the Railroad and may thereafter be used and maintained as such by the Railroad.

IV.

The State upon completion thereof shall own and at its expense shall maintain the above-mentioned 72 inch storm sewer and 24 and 48 inch sanitary sewer where the same extend across the right of way and under the roadbed and track of the Railroad as relocated and the Railroad shall own and at its expense maintain the above-mentioned 30 inch storm sewer to be constructed as herein provided along its relocated line of railroad. The State shall at State expense maintain the said retaining walls, fence posts and fencing and the Railroad shall at its expense maintain circuit protection wires attached to posts erected and maintained by the State. To the extent that it may now or hereafter legally do so, the State, upon completion thereof, shall at its expense maintain in their entirety said highway bridges and approaches thereto over and across the premises, roadbed and track of the Railroad. The State agrees that it will do nothing and permit nothing to be done in the maintenance

of said sewer lines, retaining walls, fences, and highway bridges which will in any way interfere with or endanger the facilities or operations of the Railroad as herein provided for. The Railroad shall have the right at any time to make changes in or additions to its railroad facilities within the limits of the construction herein contemplated; provided, however, that the usefulness thereof for highway purposes shall not be impaired.

V.

All work herein provided to be done by the State or its contractor or contractors on the right of way or upon, over and across the tracks of the Railroad covered by this agreement shall be done in a manner satisfactory to the Railroad and shall be performed at such time and in such manner as not to interfere unnecessarily with the movement of trains or traffic upon the tracks of the Railroad. The State shall require its contractor or contractors to use all care and precaution necessary to avoid accident, damage or interference to the Railroad's tracks or to the trains or traffic using its tracks and to notify the Railroad a sufficient time in advance whenever the contractor is about to perform work adjacent to the tracks, to enable the Railroad to furnish flagging and such other protective service as might be necessary to insure safety of railroad operations, all as provided for in Exhibit B attached hereto, and the Railroad shall have the right to furnish all such flagging or protective service as in its judgment is necessary and the State or its contractor or contractors shall reimburse the Railroad for the cost thereof. Wherever safeguarding of trains or traffic of the Railroad is mentioned in this agreement, it is intended to cover all users of the Railroad's tracks having permission for such use.

VI.

Any contract between the State and its contractor or subcontractor to perform the work herein provided to be done by the State shall require the said contractor or contractors to protect the Railroad and any other railroad occupying or using the Railroad's right of way or lines of railroad against all loss and damage arising from the activities of the contractor, his forces or any of his subcontractors or agents; and shall further provide that the contractor shall furnish to the Railroad a Railroad Protective Liability Insurance policy providing for protection to the Railroad in accordance with the United States Bureau of Public Roads Memorandum 20-12 issued March 5, 1959. The limits of such policy or policies shall be not less than $250,000.00 for all damages arising out of bodily injuries to or death of one person, and, subject to that limit for each person, a total of $1,000,000.00 for all damages arising out of bodily injuries to or death of two or more persons in any one accident; and not less than $250,000.00 for all damages arising out of injury to or destruction of property in any one accident, and, subject to that limit for any one accident, a total limit of $1,000,000.00 for all damages arising out of injuries to or destruction of property during the policy period. Said insurance shall be executed by a corporation qualified to write the same in the State of Washington, and shall be delivered to and approved by the Railroad prior to the entry upon or use of its property by any contractor.

VII.

The State shall promptly upon receipt of bills therefor reimburse the Railroad for its actual and direct costs and related indirect costs incurred in performing the work and furnishing the materials agreed to be performed or furnished by the Railroad in Article 1-B hereof to the extent such costs are reimbursable under the terms of the United States Bureau of Public Roads Policy and

Procedure Memorandum 30-3, dated August 15, 1955 and amended by PPM 30-3 (1) dated May 20, 1960, PPM 30-3 (2) dated September 30, 1960, PPM 30-3 (3) dated October 28, 1960, PPM 30-3 (4) dated January 16, 1961, PPM 30-3 (5) dated January 27, 1961, PPM 30-3 (6) dated April 3, 1961, and PPM 30-3 (7) dated October 23, 1961.

Policy and Procedure Memorandum 30-3 also provides that monthly progress bills for incurred costs may be made by the Railroad and if the Railroad so desires to prepare monthly billing in accordance with these provisions it may do so, provided the Railroad shall keep an accurate and detailed account of the actual cost and expense as incurred by it, or for its account, in the performance of the work it herein agrees to perform.

The Railroad, for performance of work as outlined in Article 1-B hereof, may bill the State monthly for the cost and expense it has incurred. These progressive invoices may be rendered on the basis of accounting records available as of date submitted. Late accounting shall be carried to the next invoice period.

The Railroad, upon completion of its work, shall render to the State a detailed statement of the actual cost and expense as incurred by it or for its account. After the State's representatives have checked the progressive invoices and the final statement and they have agreed with the Railroad's representatives that the costs are reasonable and proper, insofar as they are able to ascertain, the State shall promptly reimburse the Railroad for 90 per cent of the amounts as agreed upon.

After the Federal representatives have audited the expenses as incurred by the Railroad, including such items of expense as may have been suspended from any previous payments, the State shall promptly reimburse the Railroad for the retained percentages and suspended items of expense, less the deduction of any item or items of expense found by the Federal representatives as not being eligible

for Federal reimbursement. If the total of the item or items of expense as may be found by the Federal representatives as not being eligible for Federal reimbursement exceeds the retained percentages plus any item of expense which may have been suspended, then the Railroad shall promptly reimburse the State for the overpayment.

VIII.

The Railroad shall have the right to attach signals, telephone, telegraph and/or power wires and appurtenances to said overhead bridges and to maintain and operate said facilities attached to said structures so long as they shall be maintained above, over and across said right of way and tracks; provided, however, that no such facilities shall be attached above the elevation of the roadway surface, or shall in any way impair the usefulness of said grade separation for highway purposes and the method of attachment is satisfactory to the State.

IX.

This agreement shall be binding upon and inure to the benefit of the successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this agreement the day and year first above written.

CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD COMPANY

Attest:

[signature] Secretary

By [signature] Vice President

STATE OF WASHINGTON
Department of Highways

Witnesses:

By W. E. McKibben Director of Highways

APPROVED FOR EXECUTION
[signature]
GENERAL MANAGER

FORM APPROVED
[signature]
General Attorney C. M. St. P. & P. R. R. Co.

APPROVED
[signature]
DIRECTOR-REAL ESTATE AND INDUSTRIAL DEVELOPMENT

Approved: [signature] Assistant General Manager

Approved as to Engineering [signature] Prin. Asst. Engr.

APPROVED [signature] Asst. Vice Pres. Operation

Chief Engr. C. M. St. P. & P. R. R. [signature]

APPROVED [signature] Asst. Chief Engineer - C. M. St. P. & P. R. R.

UC 684

APPENDIX G

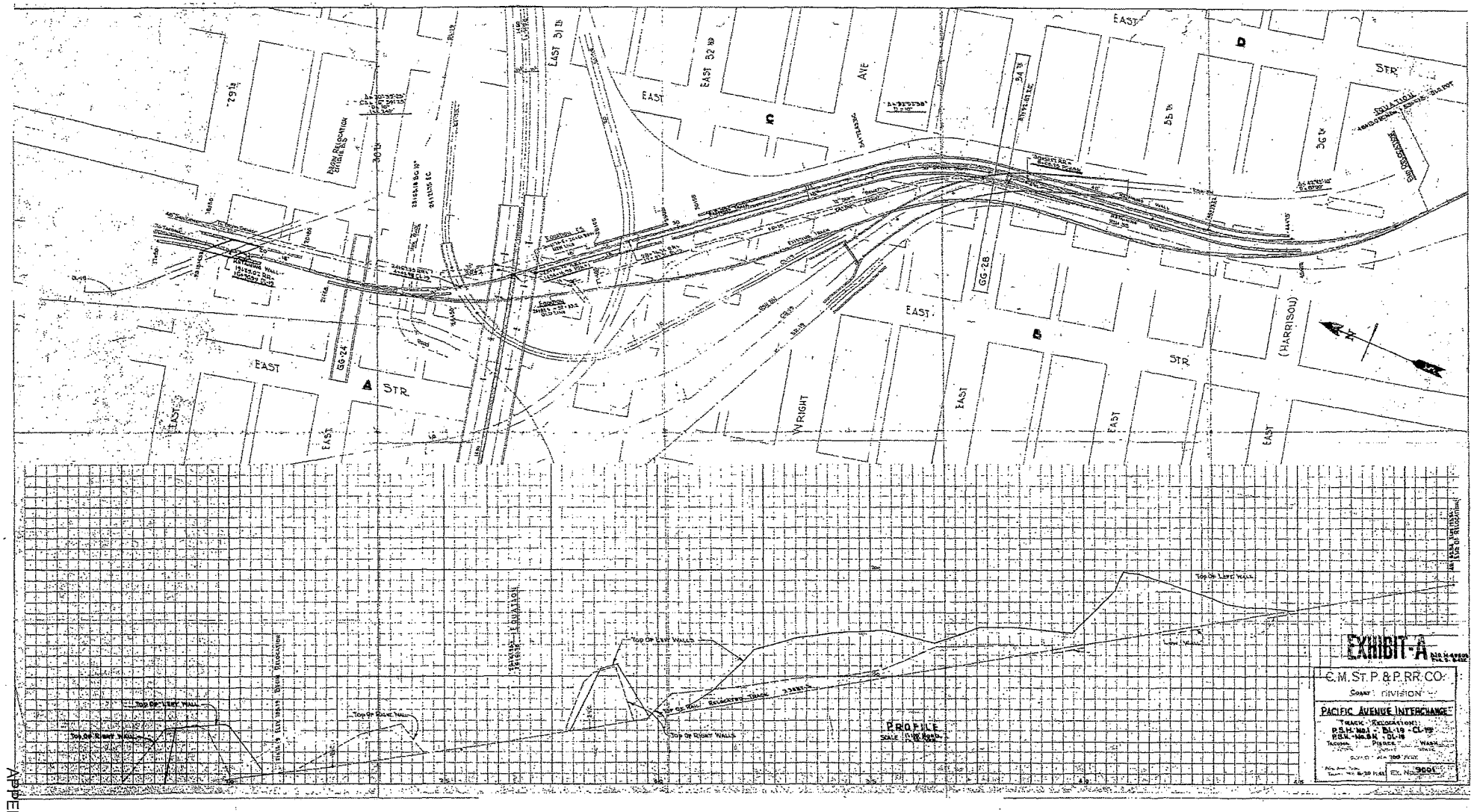


EXHIBIT-A
C.M.ST.P.&P.RR.CO.
COAST DIVISION
PACIFIC AVENUE INTERCHANGE
TRACK - RELOCATION
P.S.H. NO.1 - CL-19 - CL-19
P.S.L. - NO.S.H. - CL-18
TACOMA PIERCE WASH.
PROFILE
EAST
WRIGHT
A STR.
B STR.
C
D
AVE
GG-24
GG-28
(HARRISON)

APPENDIX G

TACOMA, WASHINGTON

Rearrange signal and communication pole line from temporary cable which was removed under MIA 11779 to accommodate contractors construction of Pacific Avenue Interchange in Tacoma, Washington.

Work to be performed by C.M.St.P.& P. RR. Company forces and billed in accordance with Policy and Procedure Memorandum No. 30-3.

	LABOR	MATERIAL	TOTAL
SUPERINTENDENCE			
Drafting	100.00		
Supervision & Inspection	150.00		
Vacation Allowance 5%	13.00		
Paid Holidays 2%	5.00		
R.R.Ret. & Unemp. Ins. 11%	29.00		
Health & Welfare 5.25%	14.00		
Workmen's Comp. Ins. 3%	11.00		
Public Liability & Property Ins. 1%	3.00		
Equipment Expense	30.00		
Personal Expense	40.00		
Contingencies 10%	40.00		
TOTAL SUPERINTENDENCE	$435.00		$435.00
SIGNALS AND INTERLOCKERS			
150 - Bond 6½" signal		66.00	
3000 - Ft. cable 5 condr. No. 9 aerial		1,140.00	
3000 - Ft. wire 3/8" messenger		60.00	
4 - Terminal box (pole type) 12 pr.		80.00	
8 - Pole type arrestor		84.00	
Tags, terminals, sleeves		10.00	
Paint, tape, cement		5.00	
Incidentals		20.00	
Store Expense 5% (1465)		73.00	
Labor	1300.00		
Average of additives @ 28.5875%	372.00		
Rental & use of equipment	220.00		
Contingencies @ 10%	189.00	154.00	
TOTAL SIGNALS	$2,081.00	$1,692.00	$3773.00
NET TOTAL COST SIGNALS AND INTERLOCKERS			$3773.00
COMMUNICATIONS SYSTEM			
3500 - Ft. wire 5/16" guy		196.00	
3000 - Ft. cable 6 pr. 16 ga.		780.00	
2 - Poles 35 ft. Cl. 5		57.00	
2 - Poles 30 ft. Cl. 5		25.00	
21 - Poles 25 ft. Cl. 5		254.00	
25 - Bolts 5/8" x 14" through		8.00	
25 - Clamps, suspension		38.00	
22 - Anchors, 3-way		53.00	
22 - Rods 5/8" x 7' anchor		39.00	
6 - Rolls wire .065 spinning		55.00	
50 - Supports 22" w/wires		6.00	
50 - Clamps, 1 bolt		10.00	
44 - Deadends 5/16" preformed		35.00	
22 - Bolts 5/8" x 12" hubeye		13.00	
2 - Boxes 12 pr.		40.00	
2 - Mountings 10 wire 4B		20.00	
14 - Arrestors 2B		21.00	
2 - Rods 5/8" x 10' ground		7.00	
Sleeves, bolts, washers, etc.		50.00	
Store Expense 5% of (1707)		85.00	
Labor	2500.00		
Average Additives 28.5875%	715.00		
Equipment Expense	600.00		
Personal Expense	100.00		
Contingencies 10%	392.00	179.00	
TOTAL COMMUNICATIONS EXPENSE	$4,307.00	$1,971.00	$6,278.00

UC 684

1962

	LABOR	MATERIAL	TOTAL
SALVAGE			
(From temporary line)			
3,000 – Ft. cable 6 pr. 16 ga.		At appraised value	
2 – Cable boxes		36.00 cr.	
2 – blocks 4B 10 wire		18.00 cr.	
16 – Arrestors 2B		20.00 cr.	
TOTAL SALVAGE		74.00 cr.	74.00 cr.
NET TOTAL COST COMMUNICATION SYSTEM			$6204.00

Office of Asst. Chf. Engr.
Sigs. & Comms.
C.M.St.P.& P. RR. Company
Chicago, Illinois June 11, 1963

JAK/jmr

UC 684

Exh. C APPENDIX G

TACOMA, WASHINGTON

Expense to install railroad obstruction warning devices on chain link fence between railroad station 30+55 - 38+90 on the north side of the track and between station 21+65 - 24+60 and 29+80 - 38+10 on the south side of the tracks, railroad direction. The chain link fence to be located on the retaining wall at the Pacific Avenue Interchange on the T&E Line between Tacoma and Hillsdale, Washington.

Work to be performed by C.M.St.P.& P. Railroad Company forces and billed in accordance with Policy and Procedure Memorandum No. 30-3.

	Labor	Material	Total
SUPERINTENDENCE			
Drafting	50.00		
Supervision & Inspection	100.00		
Vacation Allowance 5%	8.00		
Paid Holidays 2%	3.00		
R.R.Ret. & Unemp. Ins. 11%	18.00		
Health & Welfare 5.25%	8.00		
Workmen's Comp. Ins. 3%	6.00		
Public Liability & Property Ins. 1%	2.00		
Equipment Expense	20.00		
Personal Expense	40.00		
Contingencies @10%	26.00		
TOTAL SUPERINTENDENCE	$281.00		$281.00
SIGNALS AND INTERLOCKERS			
1 - case, 8-way relay		214.00	
2 - Foundation, pedestal case		27.00	
1 - DN-11 relay 4 pt., 1000 ohm		73.00	
1 - RT-11 rectifier line		50.00	
5 - Cells, CME-5 storage battery		44.00	
6100 - Ft. wire No. 10 WPHD line		243.00	
1000 - Ft. wire No. 16 flexible		40.00	
4 - Ground rod 5/8" x 10'0"		14.00	
20 - Pole type bracket with insulator		10.00	
6 - Pole type deadend		4.00	
800 - Ft. cable 3 condr. No. 9 pkwy.		424.00	
100 - Ft. cable 19 condr. No. 14 aerial		67.00	
4 - Pole type arrestor		42.00	
Tags, tape, terminal		10.00	
Paint, screws, cement		10.00	
Incidentals		30.00	
Store Expense 5% (1302.00)		65.00	
Labor	1700.00		
Average of additives @ 28.5875%	486.00		
Rental & use of equipment	260.00		
Contingencies @10%	245.00	137.00	
TOTAL SIGNAL	$2691.00	$1504.00	$4195.00
SALVAGE			
1 - 4-way relay case (scp)		3.00	
Total Salvage		3.00 cr.	3.00 cr
TOTAL COST OF WORK			$4473.00

Office of Asst. Chf. Engr.
Sigs. & Comms.
C.M.St.P.& P. RR. Company
Chicago, Ill. June 11, 1963

UC 684

JAE/jmw

Exh. CC

TACOMA, WASHINGTON

Proposed Relocation of Track for Pacific Avenue Interchange on T&E Line
(Per P.&P.M. 30-3)

DESCRIPTION OF ITEMS	QUANTITY	UNIT	UNIT COST	LABOR	MATERIAL	TOTAL
Permanent Work						
Materials:						
Grading & Drainage - by the State						
132# Rail S.H. 4795 L.F.	105.49	NT	44.00		$4,642	
O.T.H. Cross Tie on Curves	624	Ea.	4.21		2,727	
O.T.H. Fir Ties	814	Ea.	3.36		2,735	
132# Angle Bars-123 pr.	138.99	Cwt.	3.10		431	
132# Tie Plates - 2876	618.34	Cwt.	3.10		1,917	
132# Rail Anchors	1730	Ea.	0.45		779	
H.T. Track Bolts - 738 ea.	15.50	Cwt.	16.70		259	
1" nutlocks	0.738	M	116.75		86	
Track spikes-5/8" x 6" 11800	95.93	Cwt.	10.60		1,017	
Store Expense	14593	$	5%		730	
Sub-ballast-to be furnished by State	2800	C.T.	-		-	
Processed Gravel - 6" under tie	650	C.Y.	1.50		975	
Transportation at 1¢ a ton mile						
Rail & O.T.M. (Chicago, Ill.)	151.52	NT	22.07		3,344	
O.T.H. Cross Ties (Terre Haute, Ind.)	63.02	N.T.	23.98		1,512	
O.T.F. Cross Ties (Tacoma, Wash.)	52.70	N.T.	- -		-	
Processed Gravel (Cle Elum, Wash.)	975	N.T.	2.08		2,028	$23,182
Credit for Materials to be Replaced						
132# Rail - 4787.32 LF	105.32	N.T.	44.00		CR 4,634	
O.T.H. Cross Ties (Less 15%)	622	Ea.	3.58		CR 2,227	
O.T.F. Cross Ties (less 15)	814	Ea.	2.86		CR 2,328	
132# Angle Bars - 123 pr.	138.99	Cwt.	3.10		CR 431	
132# Tie Plates - 2872	617.48	Cwt.	3.10		CR 1,914	
132# Rail anchors	1730	Ea.	0.45		CR 779	
H.T. Track bolts - 738	15.50	Cwt.	16.70		CR 259	
1" nutlocks	0.738	M	116.75		CR 86	
Track Spikes (less 25%)	95.83	Cwt.	7.95		CR 762	CR 13,420
Repairs, depreciation & rental of equipment					1,000	1,000
Labor						
Engineering				900		
Accounting				300		
Install track	2397.5	L.F.	1.57	3,764		
Shift track	300	L.F.	1.00	300		
Unload & apply ballast	650	C.Y.	2.20	1,430		
Line & dress track	2697.5	L.F.	0.32	863		
Take up track	2393.66	L.F.	0.80	1,915		
Vacation allowance	9472	$	5%	473		
Paid Holidays	9472	$	2%	189		
Health & Welfare Fund	10134	$	5.25%	532		
RRA & RUIA Taxes	10134	$	11%	1115		
Insurance	9945	$	4%	398		12,179
				12,179	10,762	22,941
	Contingencies 10%			1,218	1,076	2,294
				$13,397	$11,838	$25,235

Office of Engineer of Maintenance of Way
Chicago, Illinois
May 24, 1963

UC 684

APPENDIX G

S 8422
M 69503
Location Tacoma, Washington
Project Pacific Avenue Interchange
Highway Freeway.

SPECIAL PROVISIONS
FOR
ELIMINATION OF HAZARDS OF RAILWAY-HIGHWAY CROSSINGS
GRADE SEPARATION STRUCTURES AND ASSOCIATED WORK,
PER PPM 21-10(5) DATED JANUARY 16, 1961

The Contractor shall conduct his work in such manner as not to damage railroad property or to interfere unnecessarily with railroad operations, all to the satisfaction of the Railroad Superintentendent. Should any damage occur to railroad property as a result of the Contractor's unauthorized or negligent operations, the Railroad Company may repair such damage and/or perform any work for protection of its property it may deem necessary. The Contractor shall reimburse the railroad promptly for materials, equipment and labor required for such repair or protective work, based on bills rendered monthly or less frequently.

No temporary grade crossing may be established for use of the Contractor without the consent of the Railroad Company. Any such temporary crossing shall be constructed, protected, maintained and removed by the railroad and the cost shall be borne by the Contractor, based on bills rendered monthly or less frequently. Except at such temporary crossing or existing open public grade crossing the Contractor shall not at any time cross the railroad right of way or tracks with vehicles or equipment of any type or character.

Prior to entry upon the railroad right of way the Contractor shall confer with the Railroad Superintendent N. H. McKegney whose headquarters are located at Tacoma, Washington, (or his authorized representative), regarding conditions for occupancy and use of the right of way, and matters concerning the safety of railroad operations. The Railroad Superintendent shall have jurisdiction over the safety of railroad operation and the Contractor shall be bound by his decision relative to construction methods and procedures which might affect safe railroad operations.

Right of entry of the Contractor on the Railroad's right of way will be granted by the Railroad Superintendent when all the insurance requirements have been fulfilled.

Before work is begun on the piers, supports or structures adjacent to any track the contractor shall submit for approval of the Engineer and Railroad Engineer a plan of the proposed sheeting and bracing details and method of installation for protection of the Railroad embankment and tracks; not less than ten (10) days notice, in writing, shall be given to the Railroad Engineer prior to beginning os such construction. During construction the Contractor shall make provisions satisfactory to the Engineer and Railroad Engineer against disturbing, in any manner, the railroad embankment or track(s).

No materials, supplies or equipment shall be stored within fifteen (15) feet of the center line of any railroad track, measured at right angles thereto.

Upon completion of the work the Contractor shall remove from the Railroad right of way all equipment, machinery, surplus materials, falsework, rubbish or temporary buildings present as a result of his use and occupancy. The site shall be left in a neat and presentable condition satisfactory to the Engineer and Railroad Superintendent.

1. REQUIREMENTS OF THE RAILROAD COMPANY IN RELATION TO PROTECTION OF ITS TRAFFIC FROM HAZARDS DUE TO THE CONTRACTOR'S OPERATIONS.

The State shall notify the Railroad Company's Division Superintendent, N. H. McKerney, whose headquarters are located at Tacoma, Wash., a sufficient time (48 hours to avoid delay to the Contractor) in advance to enable the Company to furnish flagmen or other protective services to insure safety of railroad operations to comply with the Railroad Company's Standard Operating Rules; Right of Entry of the State's Contractor on the Company's right of way will be granted by the Company's Division Superintendent upon request from the State after the Company's Chief Engineer has received a copy of the Railroad Protective Insurance Certificates from the Contractor and has notified the Division Superintendent and the State that said insurance has been approved by the Company, and upon completion of satisfactory arrangements with said Division Superintendent for progress of the work without danger to train operations.

2. CONDITIONS UNDER WHICH FLAGGING PROTECTION SHALL BE REQUIRED:

(A) Whenever construction operations or materials will be or may encroach upon the minimum allowable statutory clearances from any track or tracks, including pile driving, the placing or removal of falsework, bracing, cofferdams, sheeting, or forms and the construction of permanent structures over or adjacent to a track;

(B) When trucks or machinery will be operated closely along or over tracks or where cranes will be handling materials or equipment over or across any track;

(C) When construction operations are in the close vicinity of power lines or railroad signal and communication lines, underground cables, fuel oil facilities or pipe lines which might result in fire or damage to such facilities to endanger railroad operations, or to endanger the public in the transaction of business on railroad premises;

(D) When excavation, tunnelling, blasting, pile driving, placing or removing cofferdams or sheeting, or similar activities might cause the railroad's tracks or buildings to be undermined, heaved out of normal level or shifted out of alignment, etc.

(E) At any other time when in the judgment of the Railroad's Superintendent or Division Engineer there is a reasonable probability of accident hazard to railroad traffic and at any other time when flagmen protection is necessary for safety to comply with Operating Rules of the Railroad.

3. MINIMUM ALLOWABLE CLEARANCES FROM TRACK DURING CONSTRUCTION shall not be less than 8'-0" horizontally from the center line of any track nor less than 22'-6" vertically above top of rail, except as specifically approved by the Division Superintendent.

4. Normally, Section Laborers, B&B helpers, B&B carpenters, Section Foremen, B&B foremen, Communications and Signal Department employees will perform flagging and protective services and furnish protective devices, but this work will not necessarily be limited to these classifications. The hourly rates of pay including additives for individuals specified vary from approximately $3.00 per hour to approximately $4.00 per hour. These rates are subject to adjustment in the event of pay increases.

The estimated cost* of flagging by Railroad Company employes for the protection of train operations, Railroad employes, or customers of the Railroad in the normal transaction of business with the Railroad, as required in connection with the Contractor's operations, which will be furnished at the prevailing hourly rates in effect at the time the service is performed, for an assigned eight-hour day for the class of men used is as follows:

No. of Flagmen	Flagmen Classification	Rate of Pay	Total Length of Time	Amount
2	Switchmen	$ 22.18	140 days	$ 6210.40
	Communication Facilities			100.00
			Sub-Total	$ 6310.40
	Plus labor surcharges established by agreement of The General Managers Association of Chicago 28.5875 %			1803.60
	Total Estimated flagging expense account of Contractor's Operation			$ 8114.00

*Time and one-half rates shall apply for all time worked before or after assigned hours and for all time worked on Saturdays, Sundays and Holidays. Flagmen's time shall include travel time from headquarters to the job site and return to the headquarters at Tacoma, Washington. Any additional expense to the railroad for meals, etc. due to requirement for extended periods of service beyond assigned hours and travel time will also be billed against the Highway Commission.

The Railroad Company pays its employees in accordance with current salary and working rules agreements with the various Railroad Brotherhoods, and the Railroad Company will be reimbursed by the Highway Commission for costs of all flagging protective services and devices including additives, which costs will be determined in accordance with said agreements.

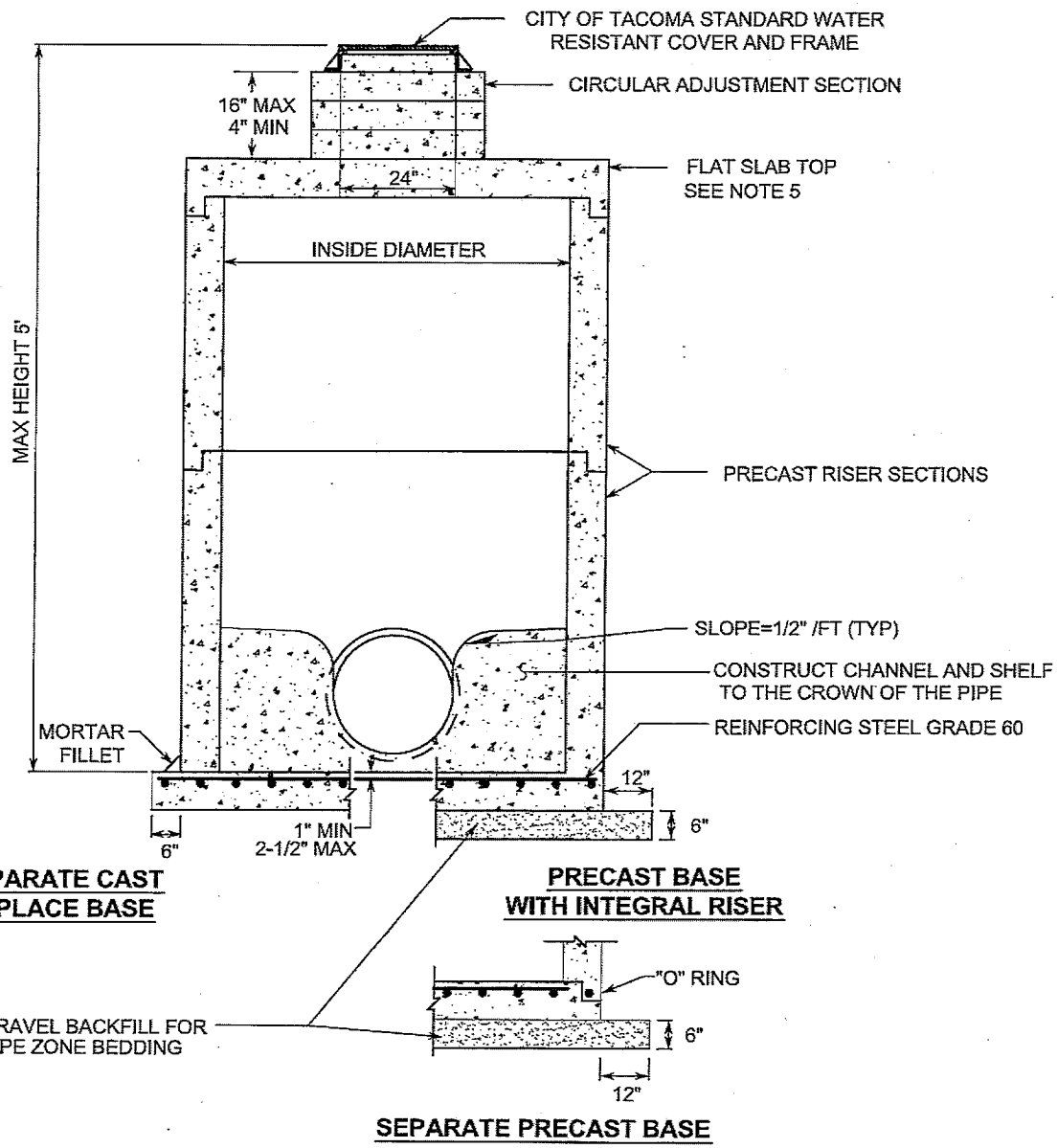
Wage rates are subject to change, at any time, by law or by agreement between Company and employees; and the arbitrary charges on labor are also subject to change. On the basis of bills rendered monthly or less frequently, the Highway Commission shall reimburse the Railroad Company promptly for service costs incurred.

The Railroad agreements to submit final billing within a 120-day period subsequent to the completion of the project as provided in Policy & Procedure Memorandum 30-3

UC 684 EXHIBIT B

APPENDIX H

City of Tacoma Standard Plan



NOTES:

1. For details showing grade ring and top slabs, see Standard Plan No. SU-21.
2. Non-reinforced concrete in channel and shelf shall be Class 3000. All precast concrete shall be Class 4000.
3. Rubber gaskets shall be used in tongue and groove joints of pre-cast sections.
4. A flexible pipe-to-manhole connector shall be employed in all connections of rigid and flexible pipes to new precast concrete manholes. The connector shall be "Kor-N-Seal" with "Wedge Korband" manufactured by NPC, Inc., or approved equal.
5. Manholes shall have the access hole centered over the channel on the upstream side of the manhole.
6. Base reinforcing steel shall be per manufacturer's recommendation.

MANHOLE DIMENSION TABLE

INSIDE DIAMETER	WALL THICKNESS	BASE THICKNESS	MAXIMUM HOLE SIZE	MINIMUM DISTANCE BETWEEN HOLES
48"	4"	6"	36"	8"
54"	4 1/2"	8"	42"	8"
60"	5"	8"	48"	8"
72"	6"	8"	48"	12"
84"	8"	12"	48"	12"
96"	8"	12"	48"	12"
108"	10"	12"	48"	12"
120"	11"	12"	48"	12"

CITY OF TACOMA
DEPARTMENT OF PUBLIC WORKS

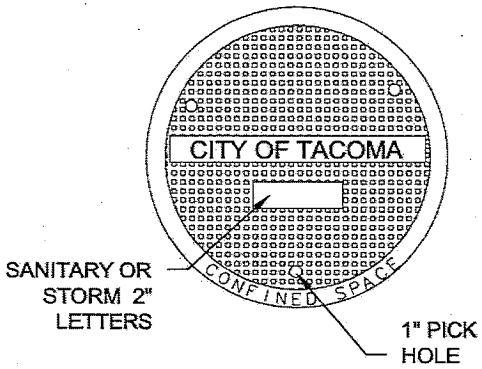
APPROVED FOR PUBLICATION

Jason Berry — 12 Jun 2009

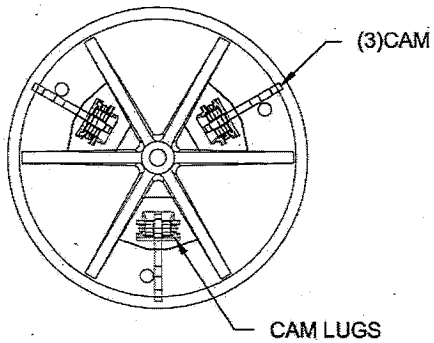
CITY ENGINEER — DATE

MANHOLE TYPE 3
5' MAXIMUM HEIGHT

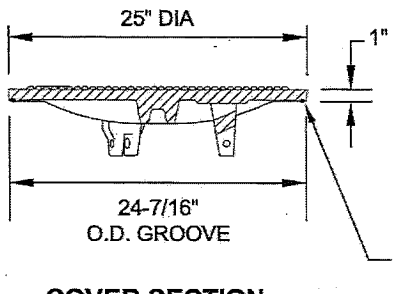
STANDARD PLAN NO. SU-19



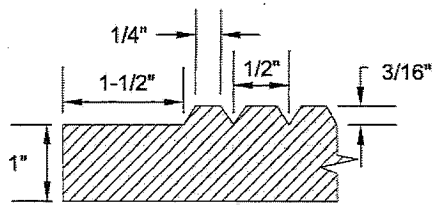
PLAN VIEW



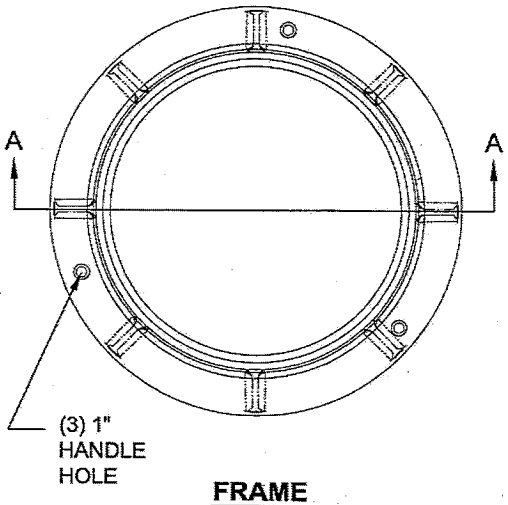
BOTTOM VIEW



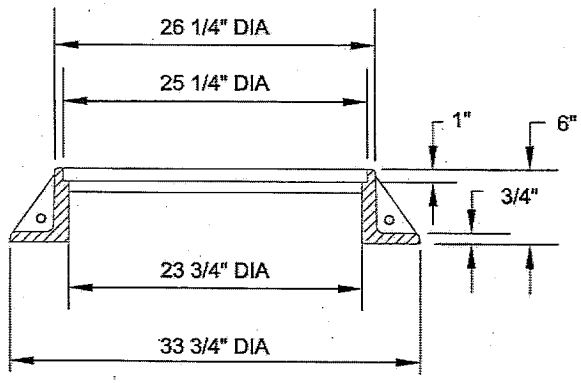
COVER SECTION



COVER SKID DESIGN



FRAME

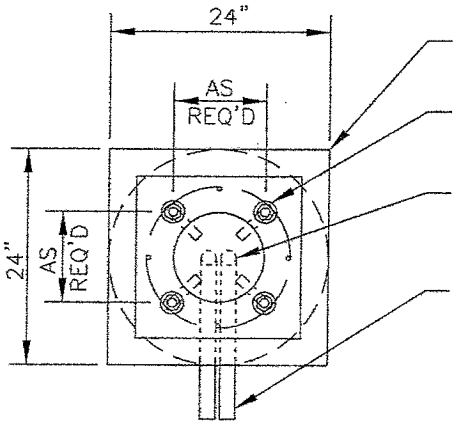


SECTION A-A

NOTES:

1. Covers shall have the word "SEWER" in 2 inch raised letters when used with sanitary sewer installations, or "DRAIN" when installed with storm sewers. All covers shall have the words "CITY OF TACOMA" in 1-1/2 inch raised letters and the words "CONFINED SPACE" in 1-inch raised letters.
2. Lids must be interchangeable, any lid shall fit any and all frames.
3. Frame and cover shall be designed for H-20 loading.
4. Frame shall be grey-iron conforming to the requirements of AASHTO M 105, grade 30B.
5. Covers shall be ductile iron conforming to ASTM A 536, grade 80-55-06.
6. Per WSDOT Standard Specification 9-05.15, metal castings shall not be dipped, painted, welded, plugged, or repaired.

CITY OF TACOMA **DEPARTMENT OF PUBLIC WORKS**	**APPROVED FOR PUBLICATION** CITY ENGINEER 3/25/13 DATE	**MANHOLE FRAME AND COVER** **STANDARD PLAN NO. SU-22**



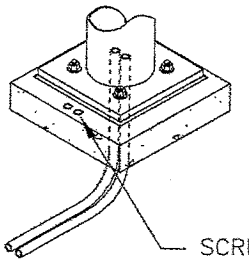
TOOL FINISH TOP AND EDGES

4EA ANCHOR BOLTS
MINIMUM TOP 8" OF BOLT SHALL BE GALVANIZED (AASHTO M111)

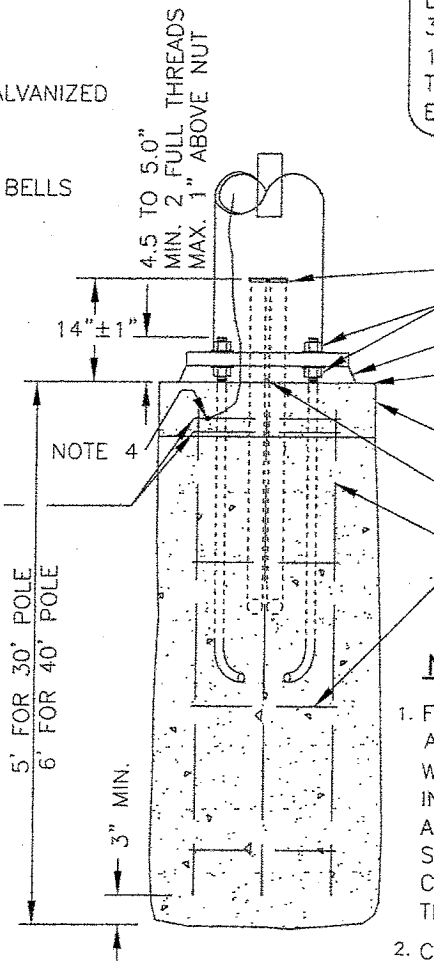
CONDUIT SHALL BE CENTERED ON POLE. W/CLEARANCE FOR COUPLINGS/PULLING BELLS

THERE SHALL BE A MINIMUM OF TWO CONDUITS IN EACH FOUNDATION. CONDUIT SHALL HAVE 18" RADIUS AND BE ORIENTED TO MINIMIZE CONDUIT BENDS.

DESIGN BASED ON INSTALLATION IN MINIMUM 3000 PSF SOIL WITH SINGLE LUMINAIRE ON 10 FOOT ARM. INSTALLATIONS NOT MEETING THESE PARAMETERS ARE SUBJECT TO ENGINEERING REVIEW.



SCRIBE A CIRCLE WITH END OF CONDUIT ABOVE EACH CONDUIT ENTERING THE FOUNDATION.



PULLING BELLS

GALVANIZED HEX NUTS & WASHERS

GROUT

TOP OF FOUNDATION TO BE SET TO SIDEWALK GRADE UNLESS OTHERWISE SPECIFIED.

TOP 6" OF FOUNDATION SHALL BE FORMED SQUARE

1/2" WEEP HOLE ON LOWEST SIDE

4 #4 VERTICAL REBARS

#4 REBAR HOOPS 8" O.C. (QTY AS REQ'D)

NOTES:

1. FOUNDATIONS SHALL BE INSTALLED IN 24" AUGERED HOLE IN UNDISTURBED MATERIAL. WHERE PRE-CAST BASES ARE USED, THE INSTALLATION SHALL BE REVIEWED AND APPROVED BY THE ENGINEER. ENTIRE HOLE SHALL BE BACKFILLED WITH CDF OR OTHER COMPACTIBLE MATERIAL APPROVED BY THE ENGINEER.
2. CALL FOR UTILITY LOCATION BEFORE DIGGING (1-800-424-5555)
3. ALL STEEL TO HAVE 3" MINIMUM CONCRETE COVER. HOOPS SHALL HAVE 135° HOOKS. ANCHOR BOLTS MAY BE SECURED TO HOOPS.
4. BOND CAGE TO GROUND LUG.

CITY OF TACOMA **DEPARTMENT OF PUBLIC WORKS**	**APPROVED FOR PUBLICATION** CITY ENGINEER 3/10/03 DATE 2/4/03	**STREETLIGHT FOUNDATION** **30' & 40'** **STANDARD PLAN NO. SL-02**

APPENDIX I

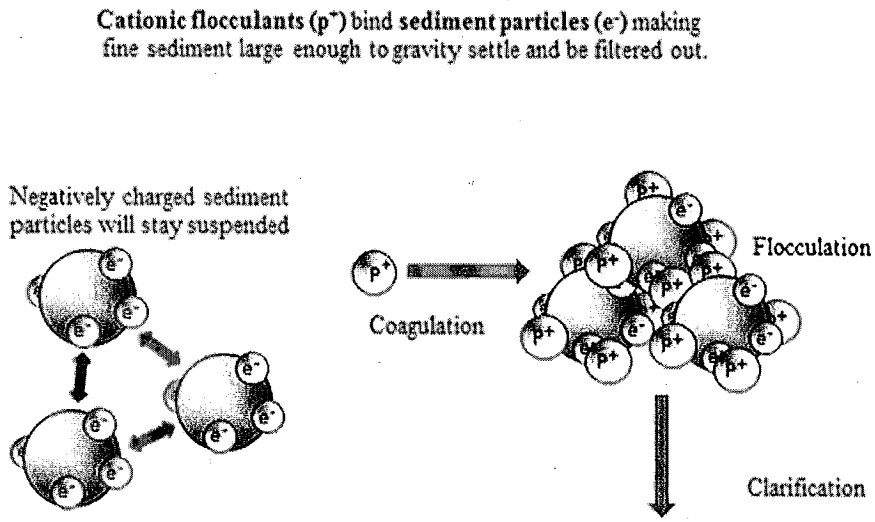
Planning, Designing and Implementing Chitosan Enhanced Sand Filtration (CESF) Systems

Planning, Designing and Implementing Chitosan Enhanced Sand Filtration (CESF) Systems

Introduction

Chitosan is a cationic biopolymer derived from chitin (found in crustacean exoskeletons) that encourages the coagulation and flocculation of suspended solids. Chitosan comes in various forms and grades, and has various applications, including treating polluted stormwater. Chemically treating construction stormwater using chitosan can provide exceptional reductions of turbidity and associated pollutants. Chitosan Enhanced Sand Filtration (CESF) stormwater treatment systems use chitosan acetate and pressurized filtration pods to rapidly clean stormwater.

Figure 1: Chemistry of chitosan



The Washington State Department of Transportation (WSDOT) has increasingly required CESF systems in construction project contracts in order to comply with environmental commitments related to receiving surface water quality and protecting sensitive areas. This CESF guidance document includes information that may be helpful during the project development phases and throughout construction. Questions regarding this guidance can be directed to the Statewide Erosion Control Lead, Elsa Piekarski piekare@wsdot.wa.gov or 360-570-6654.

Understanding the CESF Treatment Process

CESF flow-through systems are considered "active" or "advanced" stormwater treatment systems because they require a power source and chemical additive. Alternatively, chitosan can

be used as part of a batch treatment process (not flow-through filtration system) per the Department of Ecology (Ecology) BMP C250; this guidance does not cover the batch treatment application because it does not treat large amounts of stormwater efficiently.

The main components of a typical CESF flow-through system include:

- stormwater collection and conveyance facilities
- an untreated stormwater storage facility
- at least one treatment cell
- pump(s), generator(s), interconnecting pipes
- lockable operational trailer
- programmable water quality control unit
- metered chemical injection system
- in-line meters and automated valves
- sand-pod filtration system

Untreated Influent

For a typical CESF system, on-site stormwater is collected and diverted to an untreated stormwater storage facility (meaning chitosan is never introduced), like a pond. Stormwater in the untreated facility can either be sent through the CESF treatment system or discharged directly to receiving waters if it already meets discharge requirements listed in the NPDES Construction Stormwater General Permit (CSWGP). Stormwater may need to be neutralized to a pH of 6.5-8.5 standard units (su) prior to be being sent to the CESF system or being discharged. Neutralization must be performed using approved methods; approved methods include CO2 sparging and using dry ice. Chitosan acetate is most effective on water that is 6.5 – 8 su.

Minimize the amount of introduced organics in the incoming runoff, such as suspended material from mulches or compost leachate, as non-sediment organics can negatively affect treatability. Polyacrylamide (PAM), either applied directly to soils or indirectly through hydraulically applied mulches, can also negatively affect treatability. Limit the use of such products in areas that drain to storage facilities used for the CESF system.

Chitosan Dosing and Mixing

Stormwater that needs treatment is pumped from the untreated storage facility through the operational trailer. This influent flow passes along in-line pH, turbidity and flow meters. As influent flow passes through the operational trailer, chitosan is added to the stormwater through a metered chemical injection device. The metered chemical injection device must be calibrated upon every system start-up and throughout the day either every 4 hours, or when influent characteristics change (i.e. average influent characteristics change by $\geq$ 20% including flow rate or turbidity levels). Calibrations are intended to prevent chemical overdosing. Chitosan acetate does exhibit toxicity for rainbow trout; chemical dosing limits and other operational requirements are developed to prevent chitosan discharges. Dosing limits can be found in the Product Designation Document for each chitosan product.

After chitosan is injected into the stormwater, a rapid mixing process must occur to ensure adequate dispersal of the chitosan. Some CESF systems include an internal mixing device; other systems may rely on another feature, like gravity or flow turbulence, to perform the mixing. Inadequate mixing negatively impacts treatment.

Pre-Treatment and Filtration

Once chitosan dosing and mixing occurs, stormwater is sent to a treatment cell where the coagulation and flocculation process begins. This process is often referred to as "pre-treatment" because it takes place before the sand filtration process. Pre-treatment is an important step because suspended solids begin to clump together and drop out of the stormwater in the treatment cell. Effective pre-treatment increases the overall efficiency of the CESF system.

Untreated influent, pre-treatment and effluent flows are continually monitored by in-line pH, turbidity and flow meters. The in-line pH and turbidity meters must be calibrated prior to every startup, and as needed if inaccurate readings become apparent.

Pre-treated stormwater is pumped from the top of the water column in the treatment cell back through the operational trailer, and to the pressurized filtration pods, where the water is forced through the filter media. Filter media requirements can be found in the Product Designation Document for each chitosan product. Filtered effluent water from the pods is measured by the in-line meters for pH, turbidity and flow rate, and discharges if it meets requirements. Discharges from CESF systems must have turbidity values of $\leq$ 10 nephelometric turbidity units (ntu) and pH values from 6.5 - 8.5 su (unless more stringent standards are required).

Pretreatment and Recirculation

If the in-line pH and turbidity meters detect effluent water to be out of compliance, the out-flow valve automatically closes and a recirculation valve is actuated, routing out of compliance water back to a treatment cell for additional treatment or settling time.

All CESF systems must be designed with some specific automated features to ensure compliance with discharge limitations. CESF systems must include a programmable device used to set discharge limitations including a pH range from 6.5 - 8.5 su and turbidity of 10 ntu or less. The programmable device must actuate the appropriate valves when non-compliant effluent is detected. The system must include automated out-flow valves that will close when non-compliant effluent is detected by the in-line pH and turbidity meters.

The system must also have a recirculation capability that can send non-compliant stormwater back to a treatment cell when an out-flow valve is closed. An audible and visual alarm must alert the operator when effluent water outside of acceptable discharge limits has been detected so the

operator can confirm the out-flow valve has closed and the offending water is being recirculated. System operators are required to make note of such occurrences in the daily operational period paperwork.

Figure 2. Generalized treatment process of a flow-through CESF system.

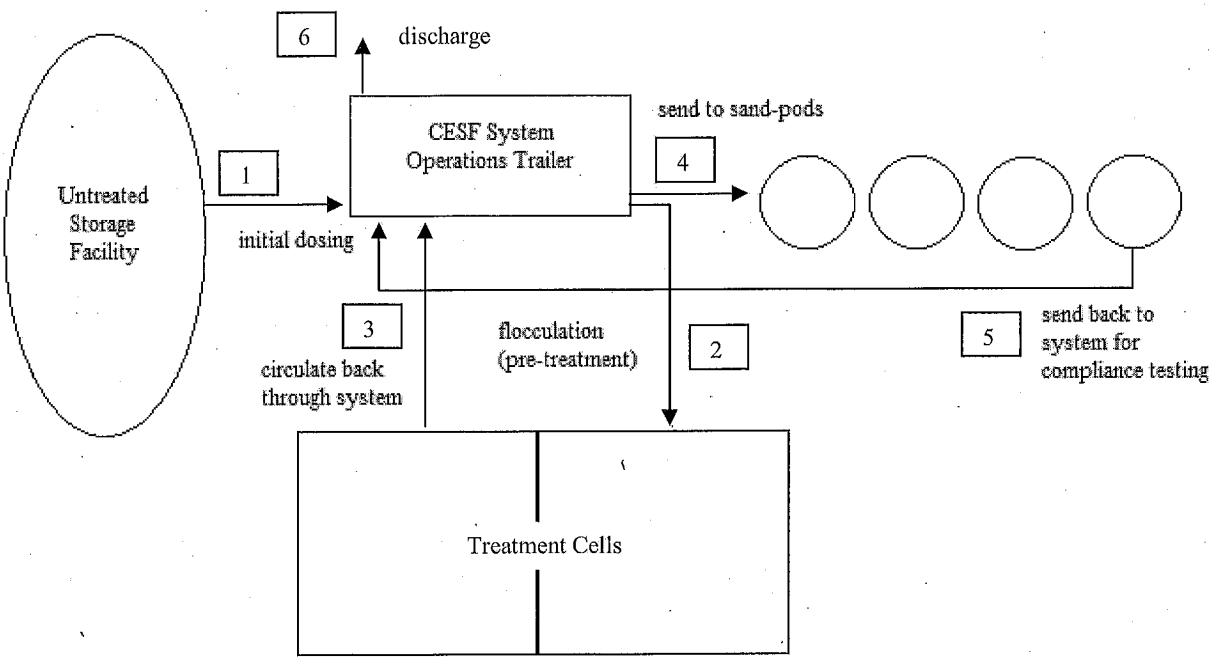


Figure 3. Normal flow.

Figure provided by © ClearWater

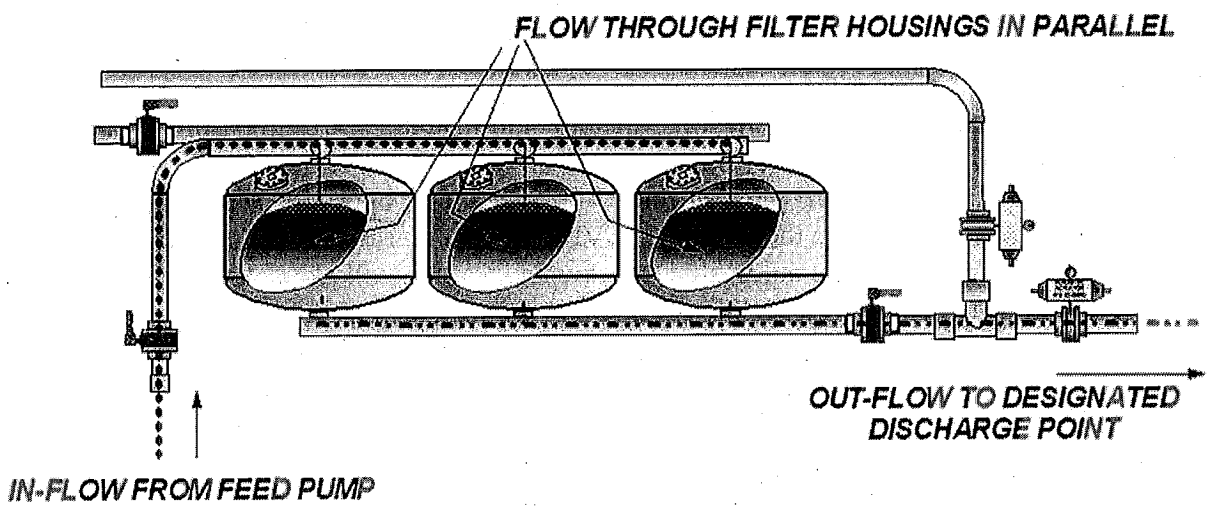
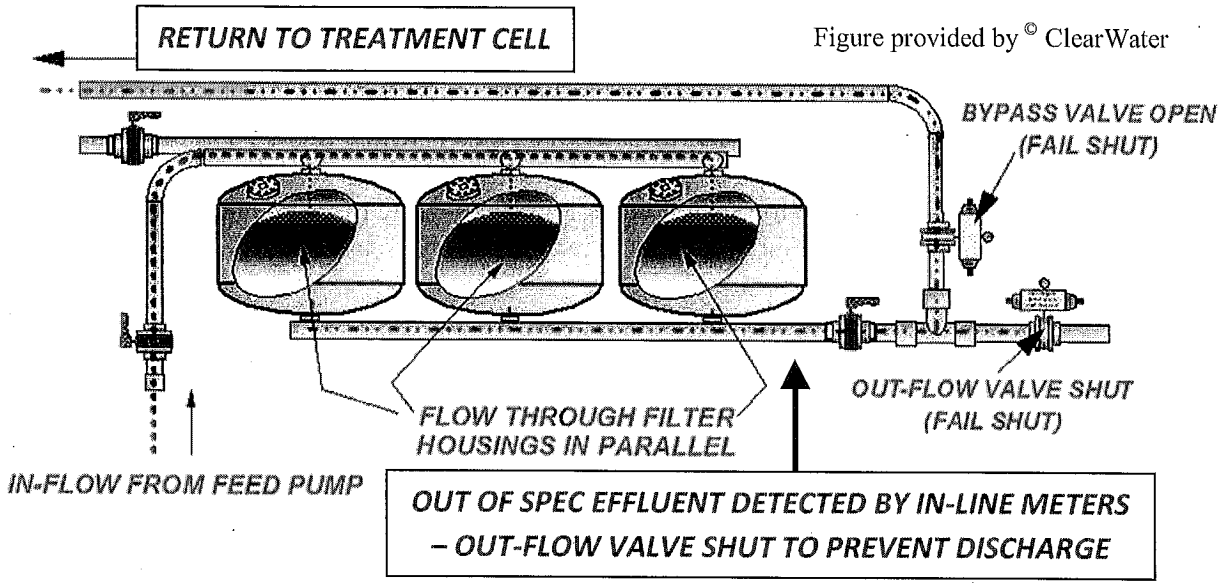


Figure 4. Flow during system start-up and when effluent does not meet discharge requirements.



Backwash Cycle

Effective pre-treatment makes the overall CESF process more efficient in two important ways. Effective pre-treatment means cleaner water can be sent to the sand pods, which thereby: 1.) reduces or eliminates the need to employ additional chitosan and pre-treatment time, and 2.) reduces the amount of sediment that builds up at the top of the filtration media.

Sediment buildup on filtration media eventually triggers a backwash cycle that works to remove buildup and clean the filter media. A backwash cycle moves one-by-one through each sand-pod; each sand pod is backwashed for several minutes before the next pod's backwash cycle begins. Each sand pod will backwash before the entire backwash cycle is complete.

When a pod is backwashing, that pod is not filtering water, and therefore not contributing to the system discharge flow rate (out-flow). However, the entire filtration system may continue to discharge because the non-backwashing pods are still filtering water. It is important to remember that the expected gallon per minute (gpm) out-flow for the system is reduced during the backwash cycle.

For example, a four pod system designed to discharge 500 gpm that is consistently receiving 450 ntu water might go into a backwash cycle every 15 minutes. The length of a backwash cycle can be manually set on some systems but must be an adequate amount of time to clean the filter media (usually 2-4 backwash minutes per pod) or the pods will crash. A typical backwash cycle on a four pod system might take 13 minutes total (just over 3 minutes per pod). In this example

system, the gpm out-flow may be reduced by about 25% (1 out of 4 pods in backwash) about 50% of the time (2 times per hour, 13 minutes for each cycle).

Backwash exits through the top of the pod and is kept separate from the filtered water. Backwash is routed back to either a treatment cell or separate holding area. Backwash can be routed back to a treatment cell because it has already been dosed with chitosan and the sediments in the backwash will settle out quickly. Keep in mind, if this method is used, the treatment cell may need to be cleaned periodically to prevent capacity problems. Uncontaminated sediment from backwash can be incorporated into the site away from drainage areas.

Depending on the pressure differentials within the pods, a backwash cycle may cause a turbidity "spike" in the effluent, which could trigger the out-flow valve to close. An experienced operator should be able to increase or decrease pressure differentials as needed and limit turbidity spikes during backwash cycles. All CESF operators are required to hold current certifications from an approved training provider (see Product Designation Document for certification requirements). It is recommended that operators are also certified as professionals in erosion and sediment control (CPESC).

Figure 5. Flow in backwash cycle.

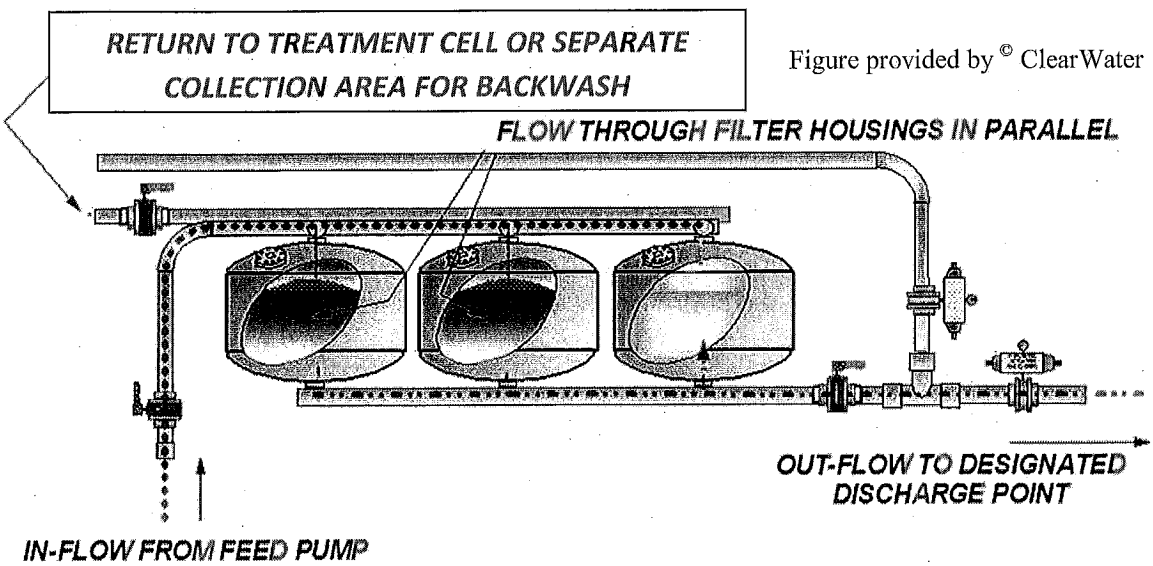


Figure provided by © ClearWater

Identifying Treatment Needs

A site specific analysis should be performed to help identify treatment needs. Relevant site-specific factors to evaluate include:

- Infiltration capacity (or other possible treatment methods such as sanitary discharge).

- Soil type (percentages of fine silts and clays).
- Climate (such as frequency, intensity, and duration of storm events).
- Proximity to impaired waters, sensitive areas and endangered species.
- Construction phasing schedule, duration of project, and clearing and grubbing footprint.
- Drainage basin characteristics (such as impervious surface or existing contamination).

Evaluating site specific factors may help determine that CESF is not necessary. For example, dispersion and infiltration may be adequate for treating turbid runoff, risky earthwork might be limited to the dry season, or the project may be able to clear and grub smaller areas and phase construction in order to limit erosion related risks.

In cases where the site specific analysis identifies risks that are best mitigated with a CESF system, specific treatment needs should be determined. This can be difficult, especially on multi-phased linear construction project, because many factors need to be considered before construction begins. The following questions can help guide the process:

- How much runoff is expected to need treatment?
- Where will the runoff be routed and collected?
- Are there flow control limitations?
- Are existing site contamination issues a concern?

How much runoff is expected to need treatment?

Many factors must be considered when sizing a CESF system. Some of the most important factors to consider are related to water management techniques that can be used to control water during construction throughout the project site (such as routing and diverting sources). Offsite water that runs onto or through project boundaries must be diverted around or tight-lined through the project to its existing discharge location. If diversion or tight-lining cannot be done, offsite water run-on must be accounted for in the CESF system sizing calculations. Once the drainage basin(s) are identified, each project must calculate expected runoff volumes and design a treatment system capable of managing those volumes.

Calculate expected runoff volumes using methods described in Volume 3, Chapter 2 of Ecology's Stormwater Management Manual: http://www.ecy.wa.gov/programs/wq/stormwater/manual.html.

The following "rational method" is one way of calculating runoff volumes from an area:

Runoff Volume = 10 yr, 24 hr Event *x* Size of Disturbed Area *x* Runoff Correction Factor

The runoff correction factor represents expected infiltration rates related to the level of existing impervious surfaces in the draining area. For example, a runoff correction factor of 0.90 means there is 10% infiltration (this indicates an existing level of impervious surface). It should also be

noted that the larger the disturbed area (over 10 acres) the more the rational method will overestimate the runoff volume.

Once expected runoff volumes are calculated, the next step is designing a system that can adequately store, and effectively treat, those volumes. **Ecology requires that total system capacity be sized to manage runoff volumes for 1.5 times the 10yr, 24hr storm event.** Total system capacity includes all storage capacities and the treatment capacity of the system within an 8 hour operational period (i.e. 300 gpm x 60 minutes x 8 hours):

1.5 *x* (Runoff volume) = (System gpm out-flow in an 8 hr period) + (All storage capacities)

Stormwater should first be routed to an untreated stormwater storage facility like a pond. The untreated stormwater facility should be designed to hold 50% of the runoff from a 10yr, 24hr storm event, and no less than that of a 2yr, 6hr storm event. Having an untreated stormwater facility (no chitosan ever introduced to the stormwater in this facility) is important because if the incoming stormwater is clean (meets benchmarks in the CSWGP), it can be discharged without chemical treatment. Once chitosan is introduced to the water, all of that water must be treated in accordance with the Use Designation Document associated with the chitosan product being used.

Example System Capacity Calculations (all values in second column are variables)

Criteria	Runoff Volumes and Rates		Design Element
Runoff volume from 1.5*10yr, 24hr storm event	A	Gallons	Required total system capacity (per BMP C250 requirements)
Untreated runoff storage capacity	**B**	Gallons	Minimum recommended untreated storage capacity (2yr, 6hr storm event)
Filtration system out-flow capacity (varies on pod size)	300	Gallons per minute (GPM)	Flow through discharge rate based on sand-pod specifications
A – 8 hr filtration system discharge flow rate (GPM*60*8)	A – 144,000 = C	Gallons	Required storage capacity (per BMP C250 requirements)
Total system capacity	144,000 +B +C ≥ A	Gallons	Treatment system flow rate (GPD) + storage volume (B) must at least equal the 1.5* 10yr, 24hr storm event
Additional storage capacity	**TBD**	Gallons	Total system capacity in excess of 1.5* the 10yr, 24hr storm event (used as contingency storage)

If feasible, it is good to have contingency storage available for extreme storm events. All storage facilities must be designed with a bypass just in case capacities are overwhelmed during an extreme storm event.

Where will the runoff be routed and detained?

System design and placement varies based on treatment needs, project footprint, construction phasing and schedule. To minimize logistical complication during construction, projects should preemptively identify appropriate stormwater collection areas, develop a plan for routing stormwater during construction, and locate appropriate areas for the physical placement of the CESF operational trailer and sand pods.

Linear projects often require complex conveyances for routing stormwater to the CESF system(s). For example, if the project is proposing one stationary system, there will need to be a plan for routing runoff to that system. There may be multiple flows from different drainage basins combining into one central treatment location. In some cases, it may be more efficient and cost effective to have multiple stationary systems or a mobile system (CESF system on a trailer along with storage or weir tanks) that can be moved throughout the construction based on where treatment is needed.

Are there flow control limitations?

Some receiving waters and municipal separate storm sewer system (MS4s) require flow control for all discharges. Therefore, certain sites are required to implement flow control for discharges during construction. It is important that flow control requirements for discharges are included in the CESF sizing and design process. Refer to Ecology's Stormwater Management Manual BMP C250 for additional information regarding sizing systems for flow control requirements.

Are existing site contamination issues a concern?

Existing site contamination can be a serious environmental concern related to construction stormwater discharges. Any known existing site conditions, such as soil contamination or leaking underground tanks, should be identified during the NOI application process for the CSWGP.

CESF systems can be altered to treat some types of contamination. A "treatment train" can be designed to include additional treatment methods. For example, activated carbon filters can be added to remove hydrocarbons. If additional treatment is included, contaminated sediments removed from the stormwater during the backwash cycle cannot be incorporated back into the site, and must be disposed of in accordance with applicable regulations.

Designing a CESF System

The first step for any designer is becoming familiar with the system requirements outlined by Ecology in the following documents:

- **BMP C250 Construction Stormwater Chemical Treatment**, as found in Ecology's *Stormwater Management Manual for Western Washington: Volume II Construction*

Stormwater Pollution Prevention
http://www.ecy.wa.gov/programs/wq/stormwater/manual.html

- **Product Designation Document**, associated to each approved chitosan product: http://www.ecy.wa.gov/programs/wq/stormwater/newtech/construction.html

These documents are the basis for system design, operation and performance. A Product Designation Document is associated with every approved chemical; this product specific document should be used when developing contract language. WSDOT does not have standard contract language for CESF because there are simply too many site specific variables that need to be considered when designing and contracting such a system. Contract language should include site specific requirements to ensure installation of a properly sized system and to limit the amount of unexpected force account charges related to operating the system.

Some Tips for Managing the Contract

Prior to 2009, designing, installing and operating CESF systems was the realm of specialty sub-contractors who specialized in CESF dynamics. The systems were capable of treating water at about $0.01 – 0.03 per gallons discharged. Of course after mark-ups, the contracting agency always pays a higher price per gallon. In 2009, Ecology began approving certain chitosan products for 'General Use', meaning anyone can use the product as long as they adhere to the requirements found in the Product Designation Document. Now everyone is in the game of designing, installing and operating CESF systems. Ecology currently has no training requirements for designing and installing CESF systems, and the training requirements to operate a system in minimal and does not guarantee a skilled operator.

Always confirm that contractor designed and/or installed system(s) is capable of managing expected runoff volumes as required. Contractors may try to charge for routing or pumping stormwater under force account due to a lack of designed storage capacity. If routing or pumping is expected because of the project footprint or site logistics, make sure such incidentals are covered in the contract. Also, if pretreatment and/or operation of the system are bid low by the contractor, this may be a sign they will be reluctant to actually operate the system because they have already been paid the big bucks to install it.

Contractors should provide a Stormwater Chemical Treatment Plan, which becomes part of the TESC plan. This plan should contain system information including design and operational details. The plan should also include information about contingency planning. This plan should be kept on-site along with the chemical treatment approval from Ecology.

Additional Sizing Details

BMP C250 recommends that system flow rates should be sized using a hydraulic loading rate (HLR) between 6-8 gpm/ft^2 (other HLRs may be appropriate depending on pod size and influent

water quality). Product Designation Documents may also include HLR requirements (usually <15 gpm/ft^2 of sand bed filtration area). The following table provides some "rules of thumb" about how loading rates and backwash cycles impact gpm out-flow rates (assuming 40% backwash time). The bold out-flow values are the realistic estimates of what a sized system (pod diameter, # pods, and HLR 8 or 10 gpm/ft^2) will actually discharge during typical operations.

Common Sand-pod Specifications

Filter Configuration		HLR @ 8 GPM/FT^2	Out-Flow @ 8 GPM/FT^2 @ 40% Backwash	HLR @ 10 GPM/FT^2	Flow @10 GPM/FT^2 @ 40% Backwash
Pod Diameter	# Pods				
48	3	300	**230**	375	**305**
48	4	400	**320**	500	**420**
54	4	509	**407**	636	**534**
60	4	628	**503**	785	**660**

CESF systems must include a minimum of three pods
Filtration media material requirements are included in the Product Designation Document
Minimum sand depth shall be 18 inches underlain with a minimum of 6 inches of 1-inch crushed rock

Getting Approval to Use Chitosan on a Project

Formal written approval from Ecology is required prior to the use of CESF treatment on a construction project regardless of site size or chitosan product used. In some cases, Ecology may require additional submittals and/or a system inspection prior to approval or CESF related discharges. The written approval from Ecology, and system design and operational information (Stormwater Chemical Treatment Plan) must be kept on-site; this information becomes part of the Temporary Erosion and Sediment Control (TESC) Plan.

Only chemicals approved by the Chemical Technology Assessment Protocol – Ecology (C-TAPE) may be used in a proposed treatment system. Each product is accompanied by a Use Level Designation and a Product Designation Document. Products with the "General Use" Level Designation (GULD) have a streamlined approval process. For these GULD products, the permittee must submit a *Request for Chemical Treatment Form* to Ecology. The form can be found at: http://www.ecy.wa.gov/programs/wq/stormwater/construction/permit.html.

Some products have only been approved for "Conditional Use", and approval for using such products will require a more rigorous review by Ecology. Ecology keeps a list of approved products at: http://www.ecy.wa.gov/programs/wq/stormwater/newtech/construction.html

Inspecting an Operational CESF System

Operational and compliance monitoring requirements are found in two documents:

- **BMP C250 Construction Stormwater Chemical Treatment**, as found in Ecology's *Stormwater Management Manual for Western Washington: Volume II Construction Stormwater Pollution Prevention* http://www.ecy.wa.gov/programs/wq/stormwater/manual.html

- **Product Designation Document**, associated to each approved chitosan product: http://www.ecy.wa.gov/programs/wq/stormwater/newtech/construction.html

Every chitosan product has its own Product Designation Document. Some chitosan products may have specific design, operational or monitoring requirements. System designers and field crews are encouraged to become familiar with the above documents. Specific operational and monitoring requirements must be performed during every operational period (startup, operation, and shutdown) and documented in a **Daily Operating Log** kept on-site in the CESF operational trailer.

Inspectors should monitor system operation daily, as discharges occur, to confirm operational and monitoring requirements are being met.

The following information is an overview of the typical operational and monitoring requirements outlined in the above documents:

- **Source control BMPs must limit on-site erosion.** *Erosion prevention BMPs must be implemented to the maximum extent feasible to minimize the need for chemical dosing.*

- **All system operators must have a CESF certification from an approved provider.** *CESF training consists of a current CESCL, 8 hours of class instruction on CESF operations and 32 hours of full-spectrum operational experience supervised by a certified operator.*

- **Daily background pH and turbidity measurements must be collected for receiving waters.** *When discharging directly to waters of the state.*

- **Jar tests or bench-scale tests must be conducted daily upon startup to determine appropriate initial chemical dosing levels.** *Additional tests must be conducted if the influent turbidity changes by 20% or greater.*

- **Record total volume treated and discharged during an operational period.** *Influent and effluent flow rates should be continuously metered and recorded at the end of the day. Influent and effluent volumes may vary due to backwash and recirculation events.*

- **Influent and effluent flows must be continually monitored for pH and turbidity and data must be recorded at 15 minute intervals.**

- **Effluent must be continuously monitored prior to discharge to ensure it is in compliance with pH (6.5 – 8.5 su) and turbidity (10 ntu or less).** *Automated shut-off valves must prevent out of compliance discharges.*

- **Record amount and concentration of chitosan used for treatment (chemical metering, pump dosing levels and daily calibration information).** *The daily operating log shall include information about the chemical being used (for example, 3% chitosan acetate solution). In addition, the chemical injection metering device must be calibrated at system start-up and then as needed throughout the day if influent average flow rate or water quality changes by 20% or greater.*

- **Only approved types and amounts of chemicals can be used for pH adjustment.**

- **Effluent shall be monitored for residual chitosan or aquatic toxicity (One test within the first 30 minutes of operation, the second within the first 2 hours of operation, and additional tests when dosing rates or average flow rates change).** *Discharges must be maintained below 0.2 ppm residual chitosan or aquatic toxicity. Additional toxicity testing may be required for discharges to non-stream waterbodies (wetlands, estuaries, lakes etc).*

- **Secondary containment must be provided for acidic or caustic material, buffering compounds, and treatment chemicals.**

- **An emergency shower and eyewash must be available in the operational trailer.**

Operating period information forms shall be completed for each operating period. At a minimum the form(s) must include:

- A record of each recirculation event
- A record of each backwash cycle
- Actions taken to remedy excessive recirculation and/or backwashing
- A record of chemical metering pump calibrations
- A record of chitosan use for pretreatment
- A record of chitosan dosage immediately prior to filters
- A record of test results for residual chitosan and/or toxicity testing

The operating period information forms shall be reviewed weekly and signed by a supervisor indicating operations are meeting requirements and performance expectations.

APPENDIX AA

Department of the Army
Section 404 Individual

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755

REPLY TO
ATTENTION OF

Regulatory Branch

SEP 3 0 2013

Ms. Carrie Berry
724 Quince Street Southeast, Suite 206
Olympia, Washington 98504-7376

Reference: NWS-2011-061-DOT
WA State Dept. of
Transportation
(Tacoma HOV, M Street)

Dear Ms. Berry:

Enclosed is a Department of the Army permit which performance of the work described in your referenced application. You are cautioned that any change in the location or plans of the work will require submittal of revised plans to this office for approval prior to accomplishment. Deviation from the approved plans may result in imposition of criminal or civil penalties.

Your attention is drawn to General Condition 1 of the permit which specifies the expiration date for completion of the work. Upon completing the authorized work, please fill out and return the enclosed *Certificate of Compliance with Department of the Army Permit* form.

We are interested in your experience with our Regulatory Program and encourage you to complete a customer service survey form. This form and information about our program is available on our website at: www.nws.usace.army.mil select "Regulatory Branch, Permit Information" and then "Contact Us."

If you have any questions please contact, Ms. Sandra Manning at (206) 764-6911 or by email at sandra.l.manning@usace.army.mil.

Sincerely,

Michelle Walker
Chief, Regulatory Branch

Enclosures

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755

REPLY TO
ATTENTION OF

Regulatory Branch

SEP 30 2013

Ms. Carrie Berry
724 Quince Street Southeast, Suite 206
Olympia, Washington 98504-7376

Reference: NWS-2011-061-DOT
WA State Dept. of
Transportation
(Tacoma HOV, M Street)

Dear Ms. Berry:

Enclosed for your signature are two initial proffered Department of the Army (DA) permit forms for your proposal to add High Occupancy Vehicle lanes on Interstate 5 from M Street to the Port of Tacoma Road in wetlands and jurisdictional ditches at the City of Tacoma, Pierce County, Washington, as described in the enclosed drawings dated February 2013. If you object to this permit decision, you may submit your objections on the enclosed *Notification of Administrative Appeal Options and Process and Request for Appeal* form. For your objections to be considered, the appeal form describing your objections must be received in our office within 60 days of the date on the appeal form.

If the entire permit is acceptable, you must sign and date both permit forms and return them in the enclosed envelope. Your copy of the fully executed permit will then be returned to you. The time limit for completing the work at General Condition 1 will be five years from the effective date of the permit. You may not modify these permit forms or their accompanying drawings. By signing the permit forms you will be indicating your acceptance of all the permit's general and special conditions some of which require you to take action by specific due dates. The signed permit forms must be returned to us within 90 days from the date of this letter or your application will be canceled.

Since a DA permit is necessary for this work, do not commence construction before obtaining a valid permit. You can begin the work authorized by this permit only after you have received your copy of the fully executed permit form. If you have any questions please contact, Ms. Sandra Manning at sandra.l.manning@usace.army.mil or by phone at (206) 764-6911.

Sincerely,

Alisa A Ralph

for Michelle Walker
Chief, Regulatory Branch

Enclosures

DEPARTMENT OF THE ARMY PERMIT

Permittee: WA St Dept of Transportation

724 Quince Street Southeast, Suite 206
Olympia, Washington 98504-7376

Permit No: NWS-2011-061-DOT

Issuing Office: Seattle District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the U.S. Army Corps of Engineers (Corps) having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: Make improvements to Interstate 5 (I-5), Interstate 705, and local streets in the City of Tacoma by adding High Occupancy Vehicle (HOV) lanes on I-5 from M Street to Portland Avenue in wetlands and jurisdictional ditches (in accordance with the plans and drawings dated February 2013, attached hereto which are incorporated in and made a part of this permit). The purpose of the project is to improve mobility and safety on I-5, and connect HOV lanes to the constructed HOV lanes on I-5 in the City of Tacoma.

Project Location: In wetlands and jurisdictional ditches at the City of Tacoma, in Pierce County, Washington.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on SEP 30 2018. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least 1 month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in accordance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification to this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as Special Conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

7. After a detailed and careful review of all the conditions contained in this permit, the permittee

acknowledges that, although said conditions were required by the Corps, nonetheless the permittee agreed to those conditions voluntarily to facilitate issuance of the permit; the permittee will comply fully with all the terms of all the permit conditions.

Special Conditions:

a. You must provide a copy of the permit transmittal letter, permit form, and drawings to all contractors performing any of the authorized work.

The following special conditions are being added to the permit to ensure protection of wetlands and to ensure mitigation is completed for the impacts:

b. The permittee shall implement and abide by the mitigation plan "*I-5: M Street to Portland Avenue - HOV Wetland Mitigation Plan*", dated July 2013. Mitigation documentation will be required as follows:

1. As-built report documenting completion of planting at the on-site temporary impact area.

2. Mitigation monitoring for the Clear Creek–Riverside (CCR) Advance Mitigation site has been completed for year 1. Additional monitoring shall be performed for years 2, 3, 5, 7, and 10 and mitigation monitoring reports summarizing all monitoring results will be due in years 1, 3, 5, 7, and 10, and a qualitative report provided for year 2. All reports must be submitted to the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch and must prominently display the reference number NWS-2010-753 which authorized the CCR Advance Mitigation site, reference number NWS-2010-278 which authorized construction of a stormwater outfall on the Puyallup River, and reference number NWS-2011-061-DOT which includes this authorization and the construction of the HOV lanes from Portland Avenue to Port of Tacoma Road including northbound bridges over the Puyallup River.

c. The permittee shall deduct 1.05 acres of wetland area credits from the Clear Creek-Riverside (CCR) Advance Mitigation site's available credits. The permittee shall complete the mitigation transaction and record the deduction on the permanent ledger. The ledger shall be provided to the U.S. Army Corps of Engineers (Corps), Seattle District, Regulatory Branch within 60 days from the date of this authorization. This credit amount is based on the expectation that the CCR site will be meeting the stated performance standards at the time the credit is required (during the project construction year). If the monitoring results show the standards are not being met, the Corps may adjust the mitigation credits required using the concurrent credit ratios rather than the advance ratios.

d. A construction status report must be submitted to the U.S. Army Corps of Engineers (Corps), Seattle District, Regulatory Branch at the start of construction for both the project and for the mitigation for temporary impacts referenced in Special Condition "b.1" above. Annual status reports on mitigation construction for the temporary impact area are required until mitigation construction is complete. The temporary impact mitigation site as-built report and drawings must be submitted to the Corps no later than one growing season following the fence placement and vegetation clearing at the temporary impact area.

e. Your responsibility to complete the required compensatory mitigation as set forth in Special Conditions "b" through "d" will not be considered fulfilled until you have demonstrated mitigation success and have received written verification from the U.S. Army Corps of Engineers.

The following Special Conditions are being added to the permit to ensure compliance with the Magnuson-Stevens Fishery Conservation and Management Act and the Endangered Species Act:

f. This U.S. Army Corps of Engineers (Corps) permit does not authorize you to take a threatened or endangered species, in particular the Puget Sound Chinook salmon, Puget Sound steelhead, and Coastal-Puget Sound Bull Trout. In order to legally take a listed species, you must have a separate authorization under the Endangered Species Act (ESA) e.g., an ESA Section 10 permit, or an ESA Section 7 consultation Biological Opinion (BO) with non-discretionary "incidental take" provisions with which you must comply. The terms and conditions from the joint BO prepared by the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) dated March 16, 2009, and amended April 24, 2009, contain mandatory terms and conditions to implement the reasonable and prudent measures that are associated with the specified "incidental take" in the BO (USFWS Reference Number 12410-2008-F-0582, and NMFS Reference Number 2008/05581 and 2008/05448). Additional terms and conditions from the re-initiation of ESA are contained within revised BOs prepared individually by the NMFS dated November 30, 2011 (NMFS Reference Number 2011/00153), and the USFWS dated December 16, 2011, (USFWS Reference Number 13410-2008-F-0582-R003). The re-initiation of ESA BOs contain additional mandatory terms and conditions to implement the reasonable and prudent measures that are associated with the specified "incidental take" in the BOs. Your authorization under this Corps permit is conditional upon your compliance with the mandatory terms and conditions associated with incidental take of the above-referenced BOs. The terms and conditions are incorporated by reference in this permit. Failure to comply with the commitments made in these documents constitutes non-compliance with the ESA and your Corps permit. The USFWS and NMFS are the appropriate authorities to determine compliance with ESA.

g. In order to protect the Essential Fish Habitat for Pacific salmon listed under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), any conservation recommendations as agreed to by the Federal Highway Administration (FHWA) and coordinated with the National Marine Fisheries Service as documented in the FHWA response letters dated April 13, 2009, and January 24, 2012, are incorporated by reference in this permit. Failure to comply with the commitments made in these negotiations constitutes non-compliance with the MSA and your U.S. Army Corps of Engineers permit.

The following Special Condition is being added to the permit to ensure compliance with Section 106:

h. The final Memorandum of Agreement (MOA), entitled "*Memorandum of Agreement Between the Federal Highway Administration, United States Army Corps of Engineers, Puyallup Tribe of Indians, and the Washington State Historic Preservation Officer Regarding the I-5 M Street To Portland Avenue High Occupancy Vehicle (HOV) Lanes, Portland Avenue to Port of Tacoma Road HOV Lanes, I-5 Portland Avenue to Port of Tacoma Road Southbound HOV Lanes, and I-5 Portland Avenue to Port of Tacoma Road Northbound HOV Lanes*" dated December 2009, will be implemented in its entirety. The Federal Highway Administration has been designated the lead federal agency responsible for implementing and enforcing the MOA. If you fail to comply with the implementation and associated enforcement of the MOA, the U.S. Army Corps of Engineers may determine that you are out of compliance with the conditions of the Department of the Army authorization and may suspend the authorization. Suspension may result in modification or revocation of the authorized work.

Further Information:

1. Congressional Authorities. You have been authorized to undertake the activity described above pursuant to:

☐ Section 10 of the Rivers and Harbor Act of 1899 (33 U.S.C. 403).

☒ Section 404 of the Clean Water Act (33 U.S.C. 1344).

☐ Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorization required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of the permit.

b. The information provided by you in support of your application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply

with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

X _____ 9/30/2013
WA St Dept of Transportation (DATE)

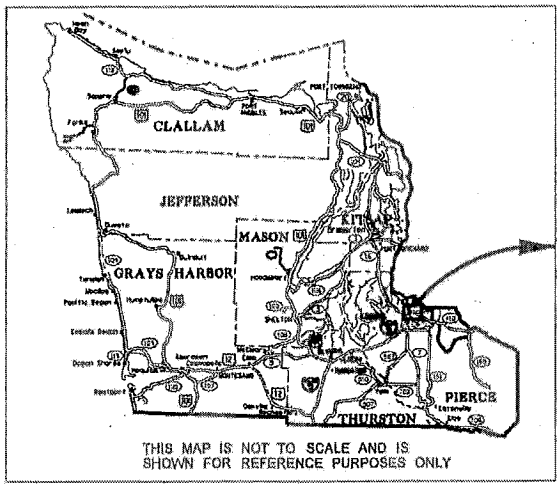
This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

for _____ 9/30/13
Bruce A. Estok (DATE)
Colonel, Corps of Engineers
District Engineer

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

_____ _____
(TRANSFEREE) (DATE)

T. 20N. R. 3E. W.M.



THIS MAP IS NOT TO SCALE AND IS SHOWN FOR REFERENCE PURPOSES ONLY

END PROJECT
I-5 MP 134.41

BEGIN PROJECT
I-5 MP 132.84

PROJECT AREA

WETLAND M1
WETLAND M3
WETLAND M2
WETLAND A1
WETLAND A2
WETLAND A3
WETLAND S
WETLAND R
WETLAND O
WETLAND P
WETLAND Q
WETLAND T

Thea Foss Waterway
PUYALLUP RIVER
705
509
5
7

CITY OF TACOMA

0 750 1500
SCALE IN FEET

PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE: NWS-2011-61-BOT	Washington State Department of Transportation
PROPOSED: I-5 M STREET TO PORTLAND AVENUE – HOV	APPLICANT: WSDOT	
LOCATION: PIERCE COUNTY, WA – TACOMA, WA	COUNTY: PIERCE	
DATUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR: Tacoma	
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: ~~N/A~~ Wetlands	
LAT: 47°14'06" LONG: -122°28'29"		
	DATE: FEBRUARY 2013	SHEET: 1 OF: 10

PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_01.dgn
6/26/2013
8:30:53 AM

TABLE 1: INDIVIDUAL WETLAND IMPACTS

Wetland	Ecology Rating	Total Wetland Area (Ac.)	Buffer Width (Ft.)	Perm. Wetland Fill (CY)	Perm. Wetland Cut (CY)	Permanent Wetland Impact (Ac.)	Permanent Wetland Impact Type	Permanent Buffer Impact (Ac.)	Permanent Buffer Impact Type	Temp. Wetland Impact (Ac.)	Temp. Buffer Impact (Ac.)	Temporary Activity
A1	III	0.06	300	0	0	0	-	0	-	0	0	-
A2	III	0.05	300	0	0	0	-	0	-	0	0	-
A3	IV	0.01	300	0	0	0	-	0	-	0	0	-
M1	II	1.25	300	0	0	0.01	Relocate ROW fence	2.25	Cut/fill	0.06[1]	0	Clearing
M2	IV	0.05	50	1130	1130	0.05	Cut/fill, new roadway, Stormwater detention tanks	N/A	Total wetland Impact	N/A	N/A	-
M3	IV	0.04	50	905	905	0.04	Cut/fill, new roadway, Stormwater detention tanks	N/A	Total wetland Impact	N/A	N/A	-
O	III	0.27	75	350	3820	0.27	New roadway, retaining wall	N/A	Total wetland Impact	N/A	N/A	-
P	III	0.09	75	0	970	0.09	New roadway, retaining wall	N/A	Cut/fill	N/A	N/A	-
Q	III	0.37	75	1	30	0.01	Cut/fill, retaining wall	0.04	Cut/fill	0	0.13	TESC pond Clear/grub
R	III	0.18	75	0	0	0	-	0	-	0	0	-
S	III	0.39	75	880	1060	0.28	New roadway, retaining wall	0.35	Cut/fill	0	0.07	Clear/grub
T	III	0.28	80	0	0	0	-	0	-	0	0	-
TOTAL				3266	7915	0.75	-	2.64	-	0.06	0.2	

NOTE:

1. FOR WETLAND M1, 0.06 ACRE IS A LONG-TERM TEMPORARY IMPACT.

JURISDICTIONAL DITCH IMPACT TABLE

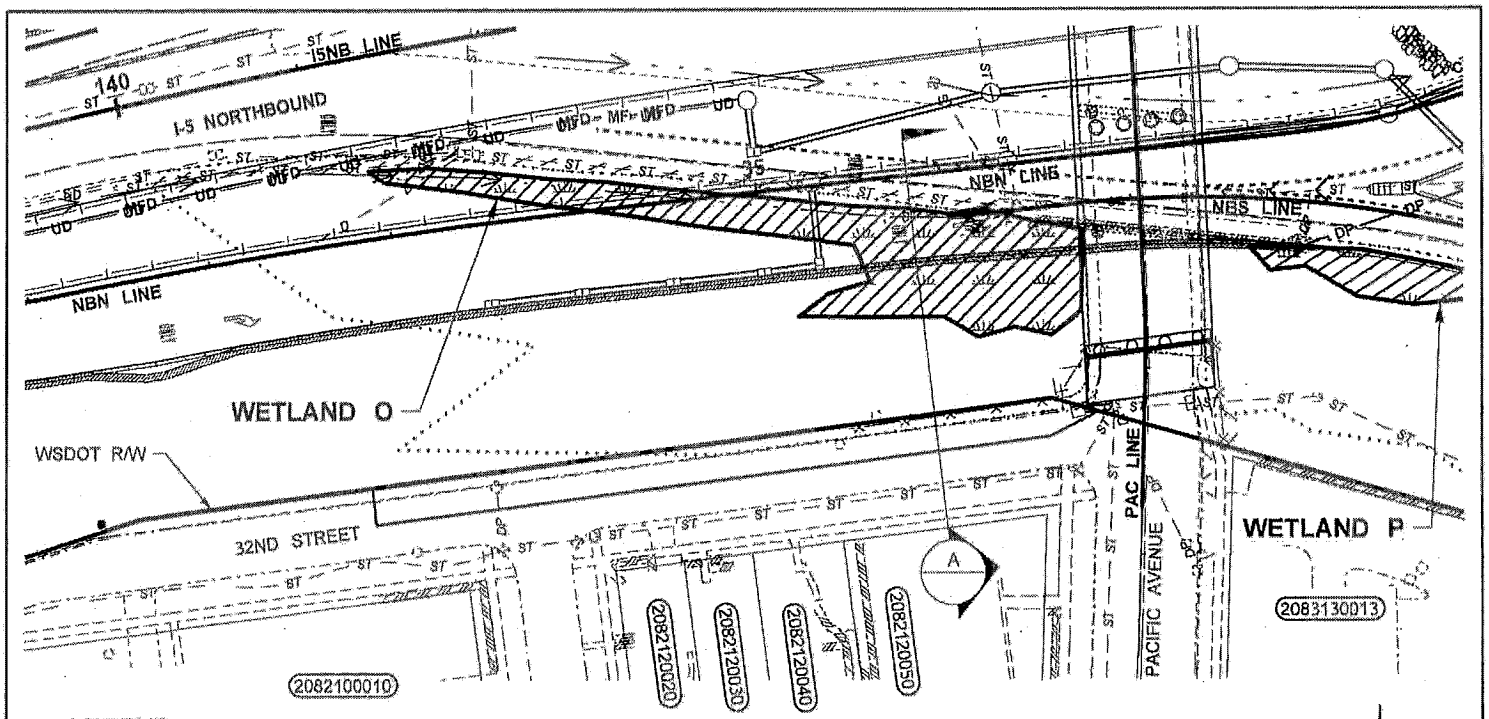
DITCH	TOTAL LENGTH (FEET)	IMPACT LENGTH (FEET)	WIDTH (FEET)	APROX. DEPTH (FEET)	AREA (SQ. FT.)	IMPACT	MITIGATION
TP-5	340	0	1.0	1	340	DITCH RELOCATE	SELF MITIGATING FLOW CONVEYENCE MAINTAINED
TP-6	244	0	1.0	1	244	DITCH RELOCATE	SELF MITIGATING FLOW CONVEYENCE MAINTAINED
TP-7	545	415	1.0	1	567		IMPACTS ARE ACCOUNTED FOR IN WETLAND S IMPACT AREA
TP-10	1,465	0	0.75	1	1,099	DITCH PIPED	SELF MITIGATING FLOW CONVEYENCE MAINTAINED

PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE: NWS-2011-61-WDT
PROPOSED: I-5 M STREET TO PORTLAND AVENUE – HOV	APPLICANT: WSDOT
LOCATION: PIERCE COUNTY, WA – TACOMA, WA	COUNTY: PIERCE
DATUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A
LAT: 47°14'06" LONG: -122°28'29"	
	DATE: FEBRUARY 2013

Washington State Department of Transportation

SHEET: 2 OF: 10

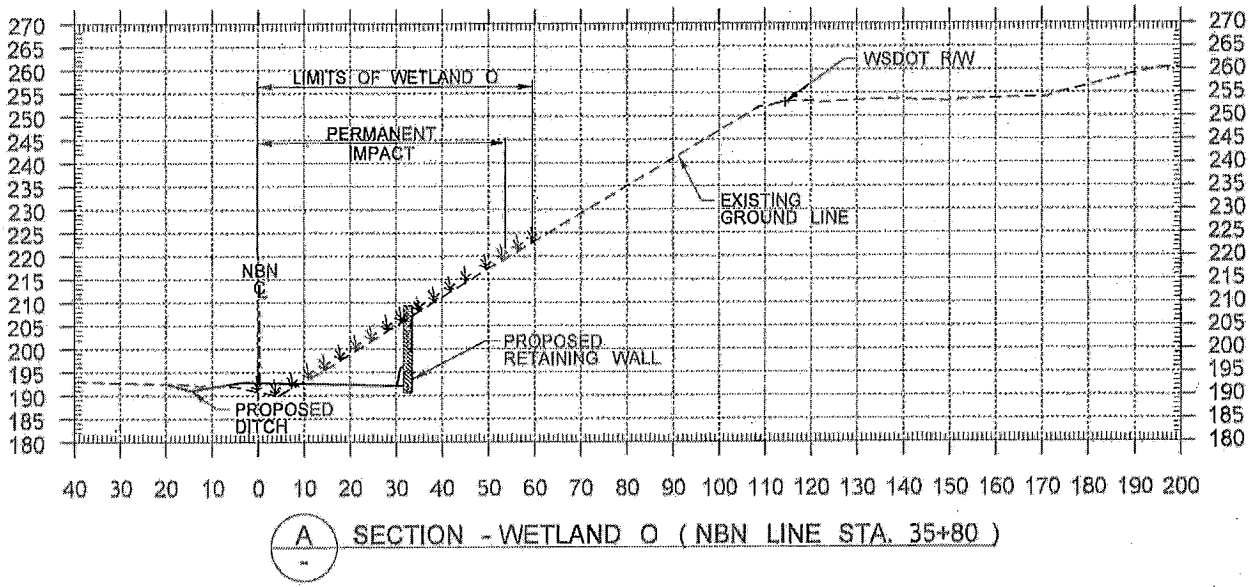
PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_02.dgn
6/26/2013
2:56:29 PM



LEGEND:

- EXISTING NON-JURISDICTIONAL DITCH
- EXISTING JURISDICTIONAL DITCH
- EXISTING DRAIN PIPE
- EXISTING STORM SEWER LINE
- EXISTING CATCH BASIN
- EXISTING GRATE INLET
- EXISTING MANHOLE
- EXISTING EDGE OF ROADWAY
- EXISTING RETAINING WALL
- TAX PARCEL NUMBER
- PROPOSED EDGE OF ROADWAY
- PROPOSED EXCAVATION / CUT LIMITS
- PROPOSED FILL LIMITS
- PROPOSED CLEARING & GRUBBING LIMITS
- WSDOT RIGHT OF WAY LIMITS
- PROPOSED RETAINING WALL
- WETLAND
- PERMANENT WETLAND IMPACT
- TEMPORARY WETLAND IMPACT
- PERMANENT BUFFER IMPACT
- TEMPORARY BUFFER IMPACT
- LONG TERM TEMPORARY WETLAND IMPACT
- WETLAND BUFFER

0 50 100
SCALE IN FEET



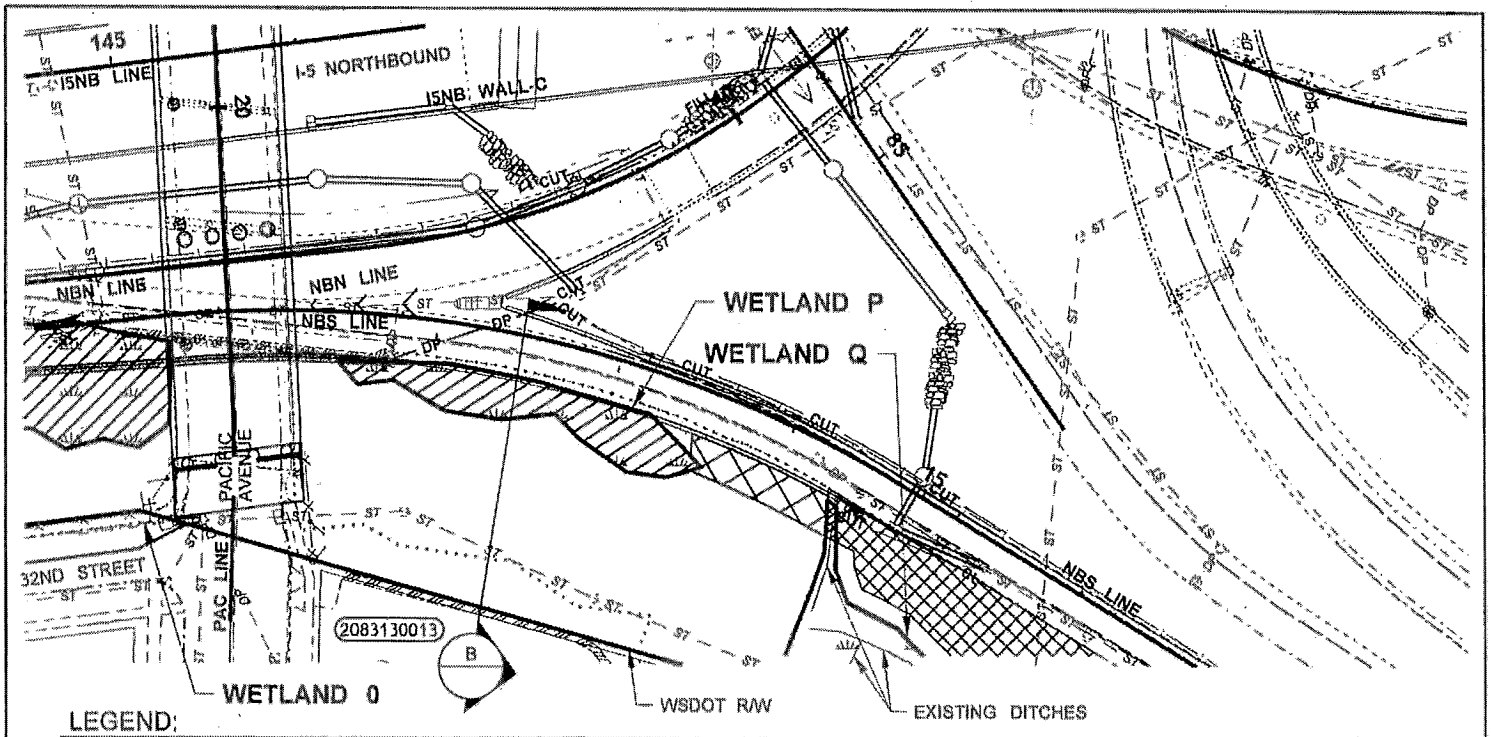
A SECTION - WETLAND O (NBN LINE STA. 35+80)

PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE: NWS-2011-61-DOT
PROPOSED: I-5 M STREET TO PORTLAND AVENUE – HOV	APPLICANT: WSDOT
LOCATION: PIERCE COUNTY, WA – TACOMA, WA	COUNTY: PIERCE
DATUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A
LAT: 47°14'06" LONG: -122°28'29"	
	DATE: FEBRUARY 2013

Washington State Department of Transportation

SHEET: 3 OF: 10

PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_03.dgn
9/16/2013
12:42:23 PM

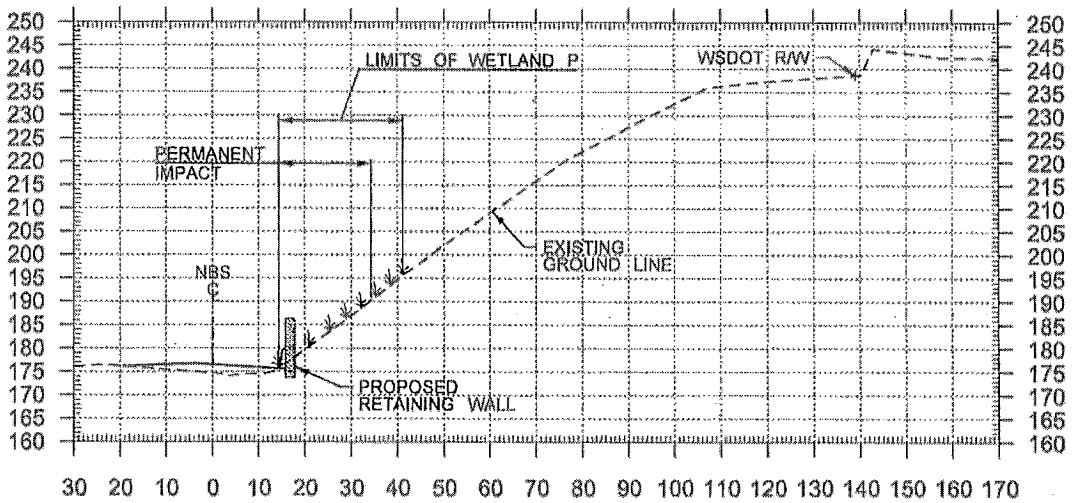


LEGEND:

- EXISTING NON-JURISDICTIONAL DITCH
- EXISTING JURISDICTIONAL DITCH
- EXISTING DRAIN PIPE
- EXISTING STORM SEWER LINE
- EXISTING CATCH BASIN
- EXISTING GRATE INLET
- EXISTING MANHOLE
- EXISTING EDGE OF ROADWAY
- EXISTING RETAINING WALL
- TAX PARCEL NUMBER
- PROPOSED EDGE OF ROADWAY
- PROPOSED EXCAVATION / CUT LIMITS
- PROPOSED FILL LIMITS
- PROPOSED CLEARING & GRUBBING LIMITS
- WSDOT RIGHT OF WAY LIMITS
- PROPOSED RETAINING WALL
- WETLAND
- PERMANENT WETLAND IMPACT
- TEMPORARY WETLAND IMPACT
- PERMANENT BUFFER IMPACT
- TEMPORARY BUFFER IMPACT
- LONG TERM TEMPORARY WETLAND IMPACT
- WETLAND BUFFER

N

0 50 100
SCALE IN FEET



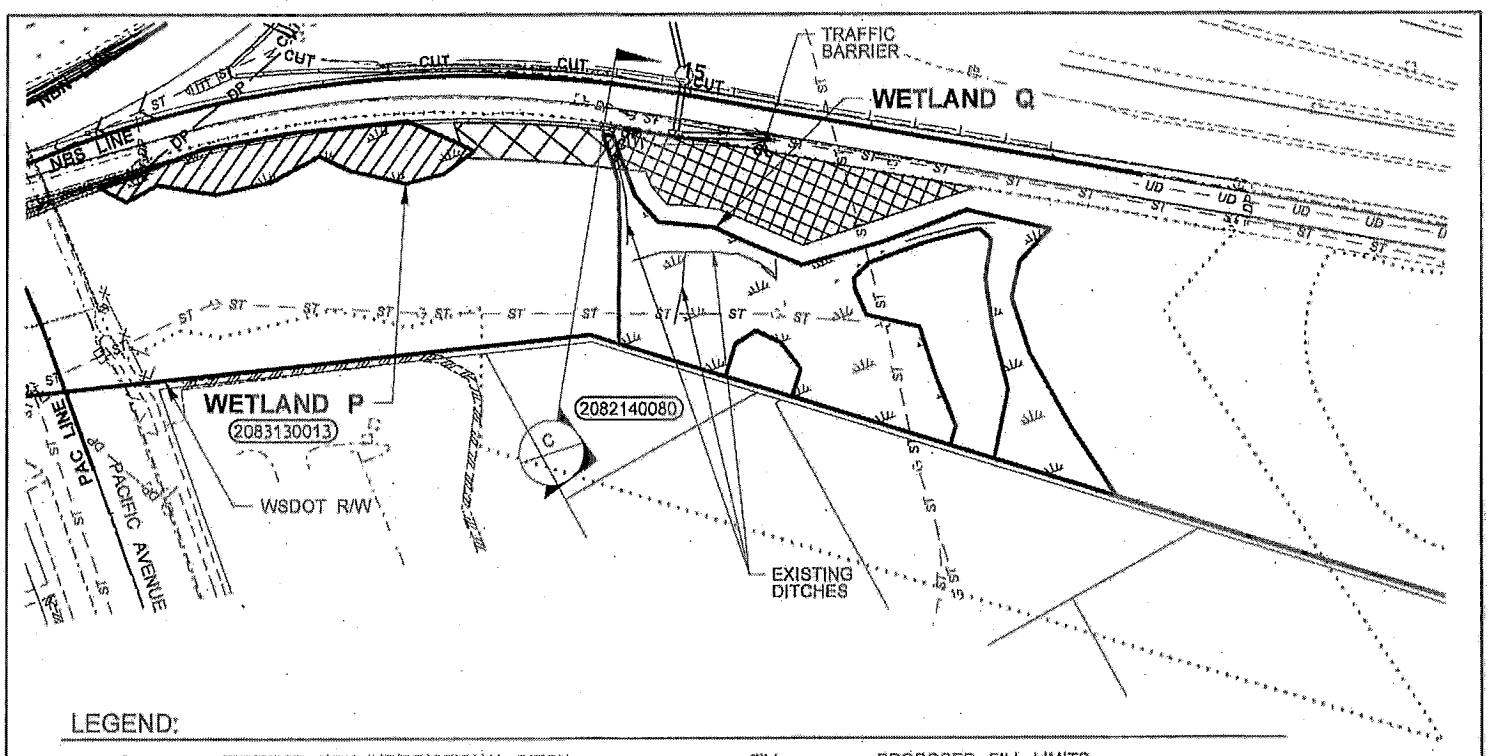
B - SECTION - WETLAND P (NBS LINE STA. 12+40)

PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE: NWS-2011-01-DOT
PROPOSED: I-5 M STREET TO PORTLAND AVENUE – HOV	APPLICANT: WSDOT
LOCATION: PIERCE COUNTY, WA – TACOMA, WA	COUNTY: PIERCE
DATUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A
LAT: 47°14'06" LONG: -122°28'29"	
	DATE: FEBRUARY 2013

Washington State Department of Transportation

SHEET: 4 OF: 10

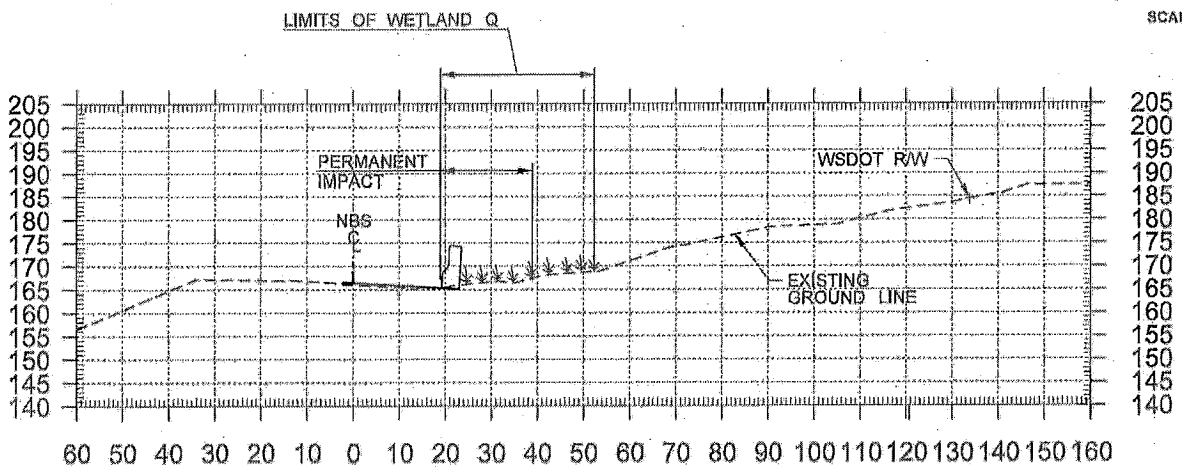
PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_04.dgn
9/16/2013
12:45:40 PM



LEGEND:

- EXISTING NON-JURISDICTIONAL DITCH
- EXISTING JURISDICTIONAL DITCH
- EXISTING DRAIN PIPE
- EXISTING STORM SEWER LINE
- EXISTING CATCH BASIN
- EXISTING GRATE INLET
- EXISTING MANHOLE
- EXISTING EDGE OF ROADWAY
- EXISTING RETAINING WALL
- 0000000000 TAX PARCEL NUMBER
- PROPOSED EDGE OF ROADWAY
- CUT PROPOSED EXCAVATION / CUT LIMITS
- FILL PROPOSED FILL LIMITS
- CG CG PROPOSED CLEARING & GRUBBING LIMITS
- WSDOT RIGHT OF WAY LIMITS
- PROPOSED RETAINING WALL
- WETLAND
- PERMANENT WETLAND IMPACT
- TEMPORARY WETLAND IMPACT
- PERMANENT BUFFER IMPACT
- TEMPORARY BUFFER IMPACT
- LONG TERM TEMPORARY WETLAND IMPACT
- WETLAND BUFFER

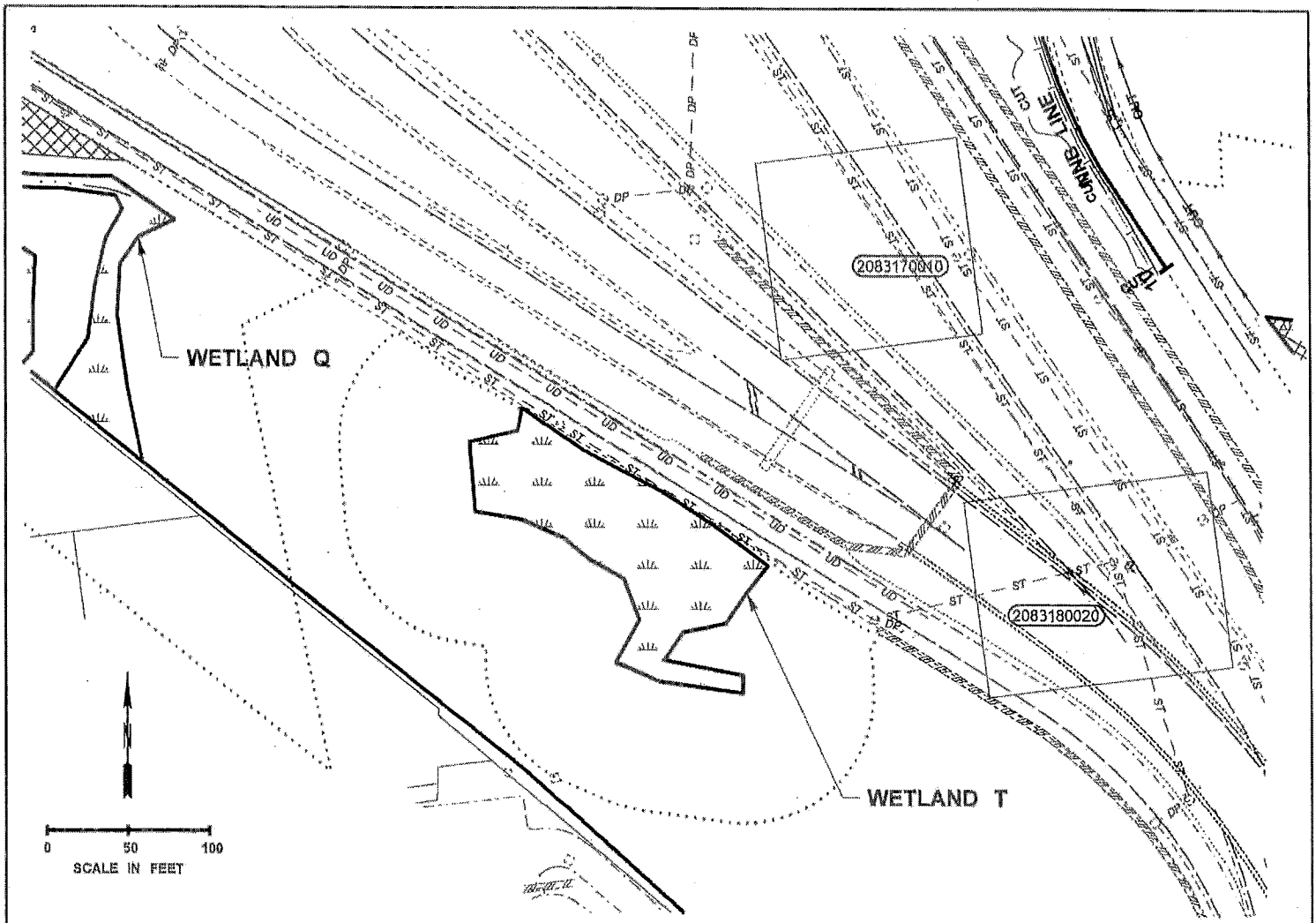
0 50 100
SCALE IN FEET



C SECTION - WETLAND Q (NBS LINE STA. 14+40.73)

PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE: NWS-2011-61-WDOT	Washington State Department of Transportation
PROPOSED: I-5 M STREET TO PORTLAND AVENUE – HOV	APPLICANT: WSDOT	
LOCATION: PIERCE COUNTY, WA – TACOMA, WA	COUNTY: PIERCE	
DATUM: HORZONTAL: NAD83, VERTICAL: NAVD88	NEAR:	
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A	
LAT: 47° 14'06" LONG: -122° 28'29"		
	DATE: FEBRUARY 2013	SHEET: 5 OF: 10

PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_05.dgn
9/16/2013
12:50:23 PM



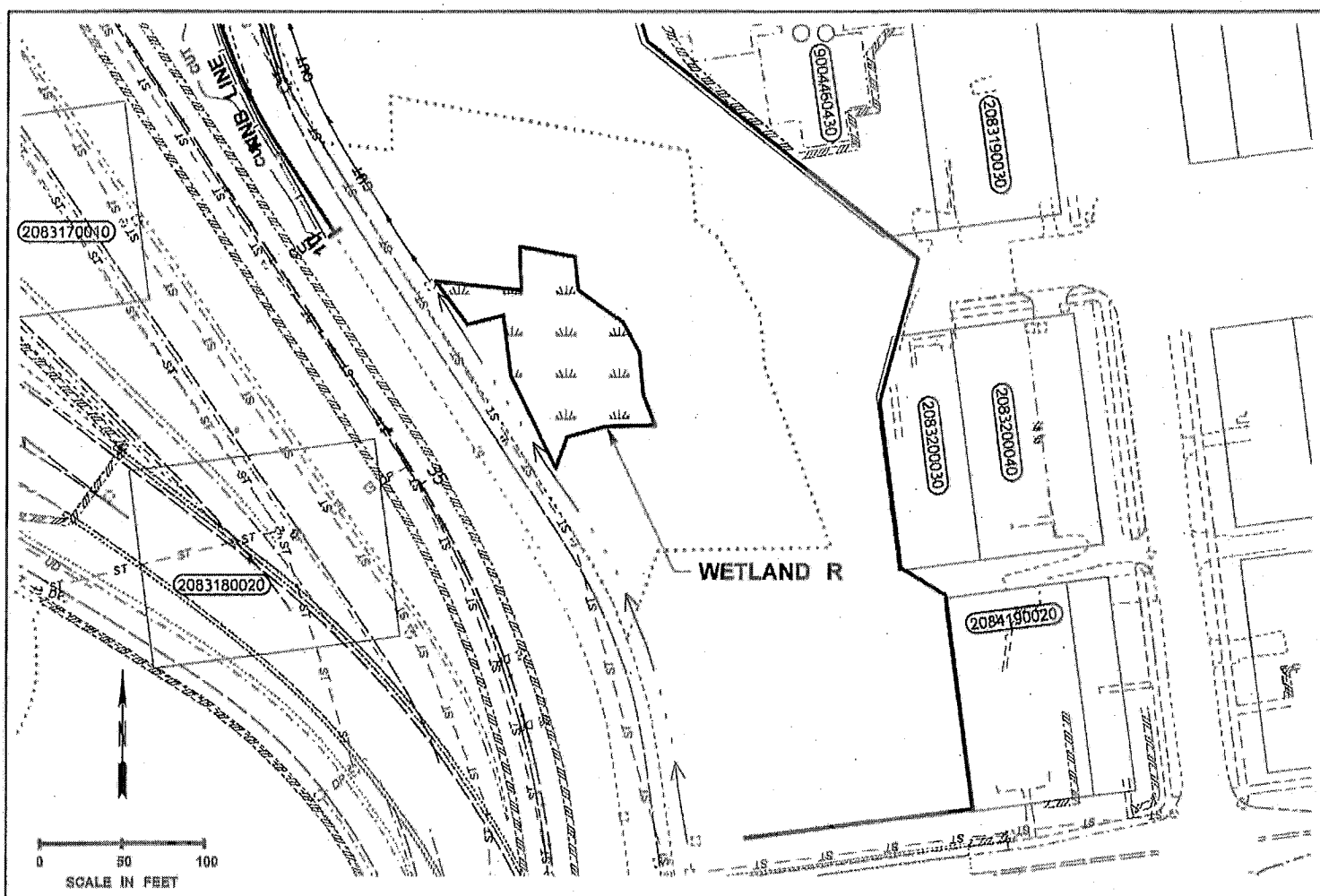
LEGEND:

EXISTING NON-JURISDICTIONAL DITCH	PROPOSED FILL LIMITS
EXISTING JURISDICTIONAL DITCH	PROPOSED CLEARING & GRUBBING LIMITS
EXISTING DRAIN PIPE	WSDOT RIGHT OF WAY LIMITS
EXISTING STORM SEWER LINE	PROPOSED RETAINING WALL
EXISTING CATCH BASIN	WETLAND
EXISTING GRATE INLET	PERMANENT WETLAND IMPACT
EXISTING MANHOLE	TEMPORARY WETLAND IMPACT
EXISTING EDGE OF ROADWAY	PERMANENT BUFFER IMPACT
EXISTING RETAINING WALL	TEMPORARY BUFFER IMPACT
TAX PARCEL NUMBER	LONG TERM TEMPORARY WETLAND IMPACT
PROPOSED EDGE OF ROADWAY	WETLAND BUFFER
PROPOSED EXCAVATION / CUT LIMITS	

WETLAND T

PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE: NWS-2011-01-WDT	Washington State Department of Transportation
PROPOSED: I-5 M STREET TO PORTLAND AVENUE – HOV	APPLICANT: WSDOT	
LOCATION: PIERCE COUNTY, WA – TACOMA, WA	COUNTY: PIERCE	
DATUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:	
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A	
LAT: 47 14'06" LONG: -122 28'29"		
	DATE: FEBRUARY 2013	SHEET: 6 OF: 10

PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_06.dgn
6/26/2013
8:32:57 AM



LEGEND:

- EXISTING NON-JURISDICTIONAL DITCH
- EXISTING JURISDICTIONAL DITCH
- EXISTING DRAIN PIPE
- EXISTING STORM SEWER LINE
- EXISTING CATCH BASIN
- EXISTING GRATE INLET
- EXISTING MANHOLE
- EXISTING EDGE OF ROADWAY
- EXISTING RETAINING WALL
- TAX PARCEL NUMBER
- PROPOSED EDGE OF ROADWAY
- PROPOSED EXCAVATION / CUT LIMITS
- PROPOSED FILL LIMITS
- PROPOSED CLEARING & GRUBBING LIMITS
- WSDOT RIGHT OF WAY LIMITS
- PROPOSED RETAINING WALL
- WETLAND
- PERMANENT WETLAND IMPACT
- TEMPORARY WETLAND IMPACT
- PERMANENT BUFFER IMPACT
- TEMPORARY BUFFER IMPACT
- LONG TERM TEMPORARY WETLAND IMPACT
- WETLAND BUFFER

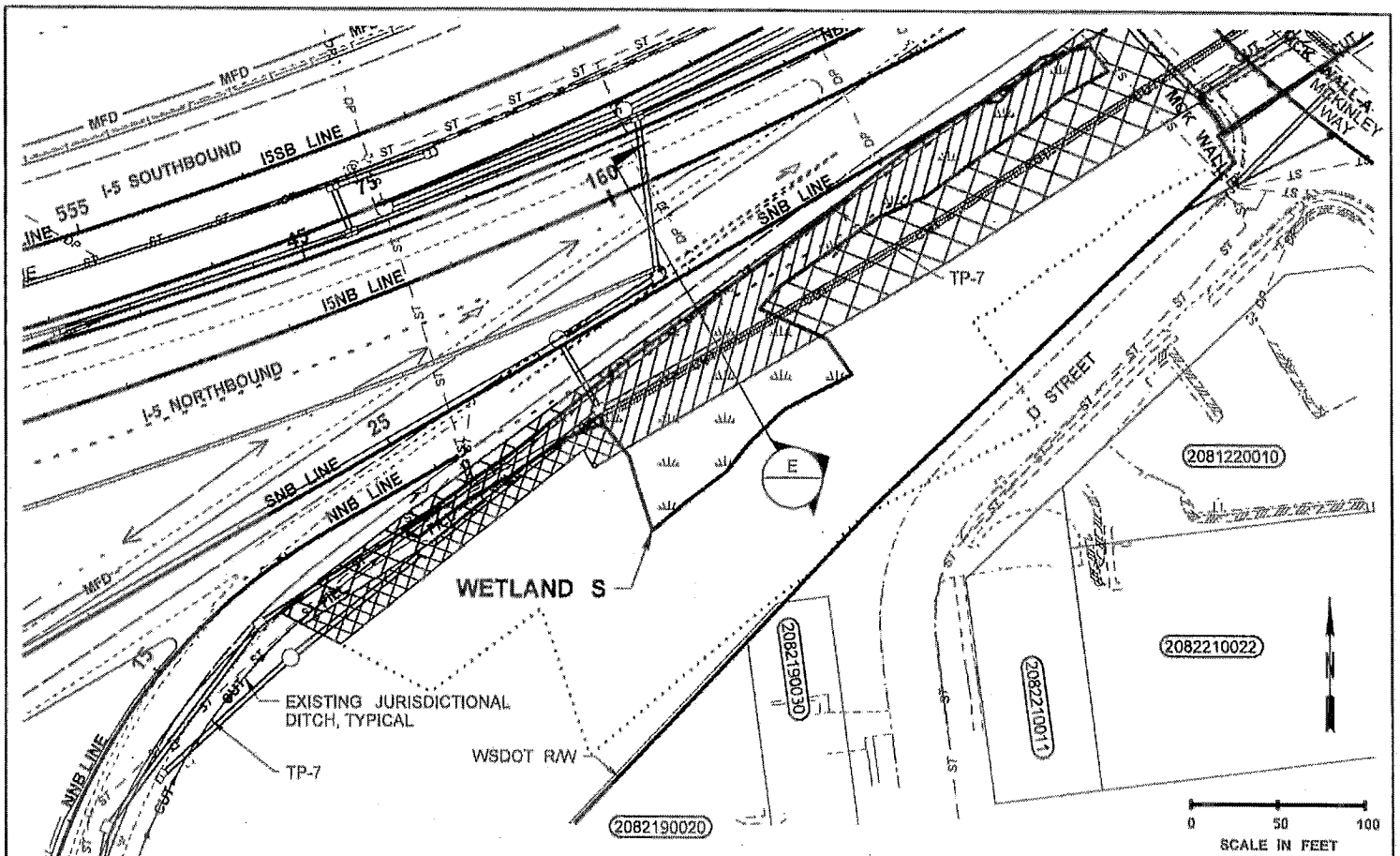
WETLAND R

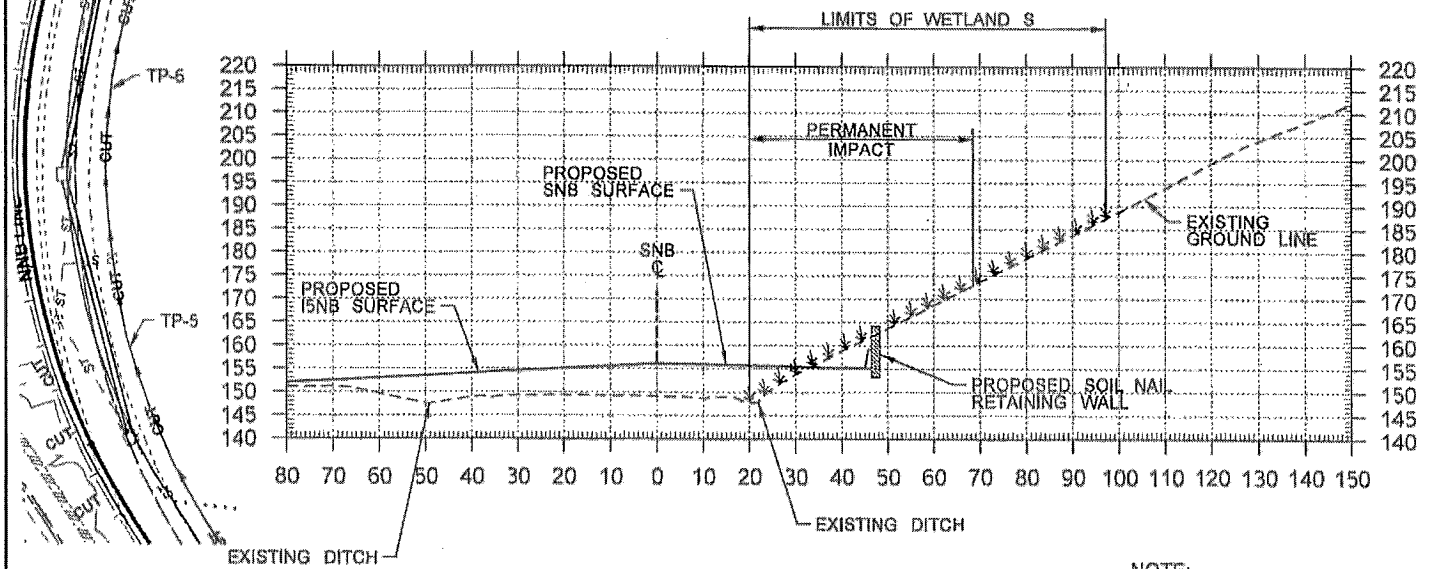
PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE: NWS-2011-01-WDT
PROPOSED: I-5 M STREET TO PORTLAND AVENUE – HOV	APPLICANT: WSDOT
LOCATION: PIERCE COUNTY, WA – TACOMA, WA	COUNTY: PIERCE
DATUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A
LAT: 47 14'06" LONG: -122 28'29"	
	DATE: FEBRUARY 2013

Washington State Department of Transportation

SHEET: 7 OF: 10

PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_07.dgn
6/26/2013
8:33:55 AM





NOTE:
SEE SHEET 6 FOR LEGEND

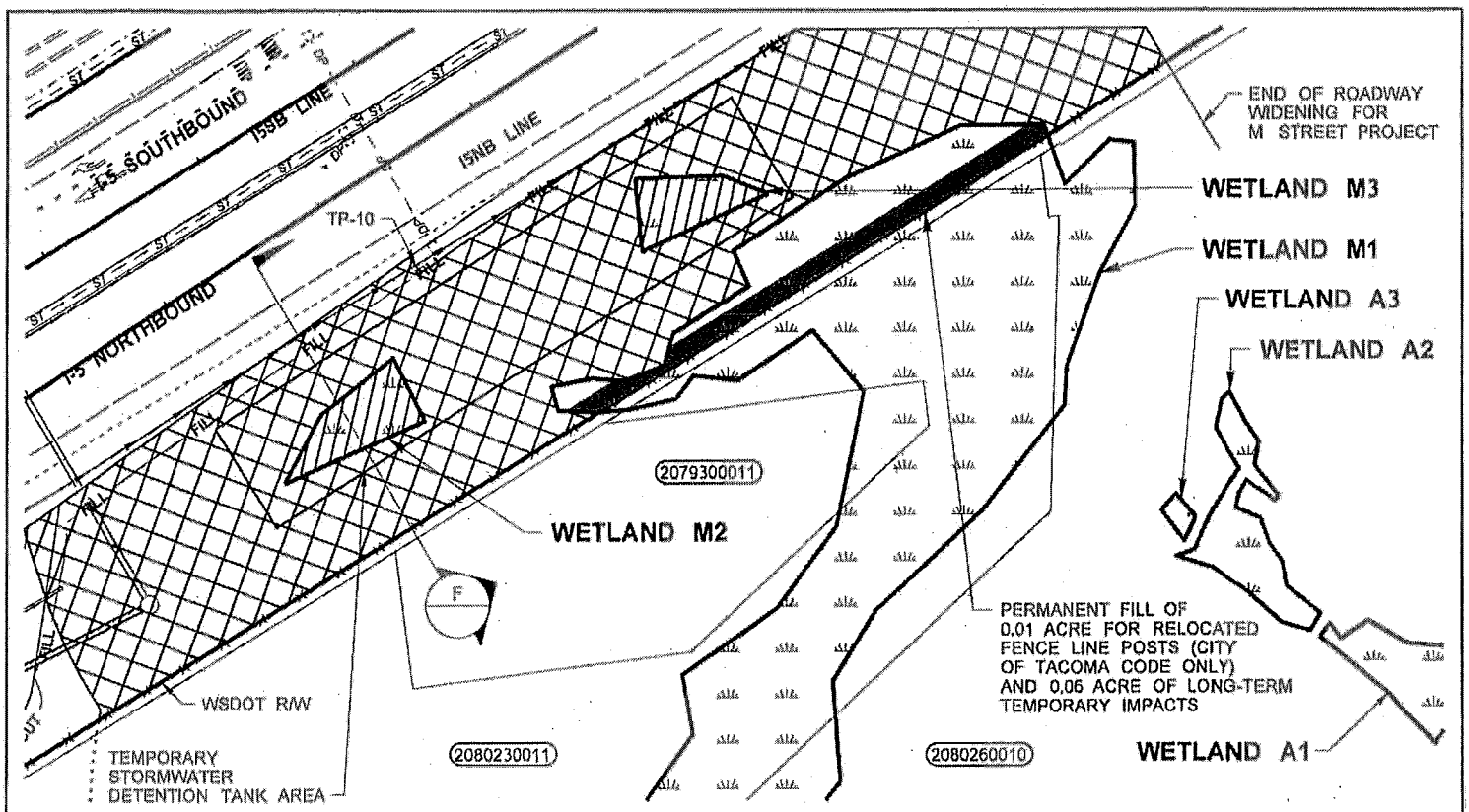
E SECTION - WETLAND S (SNB LINE STA. 27+00)

PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE: NWS-2011-61-BUT
PROPOSED: I-5 M STREET TO PORTLAND AVENUE - HOV	APPLICANT: WSDOT
LOCATION: PIERCE COUNTY, WA - TACOMA, WA	COUNTY: PIERCE
DATUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A
LAT: 47°14'06" LONG: -122°28'29"	
	DATE: FEBRUARY 2013

Washington State Department of Transportation

SHEET: 8 OF: 10

PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_08.dgn
9/16/2013
12:53:55 PM

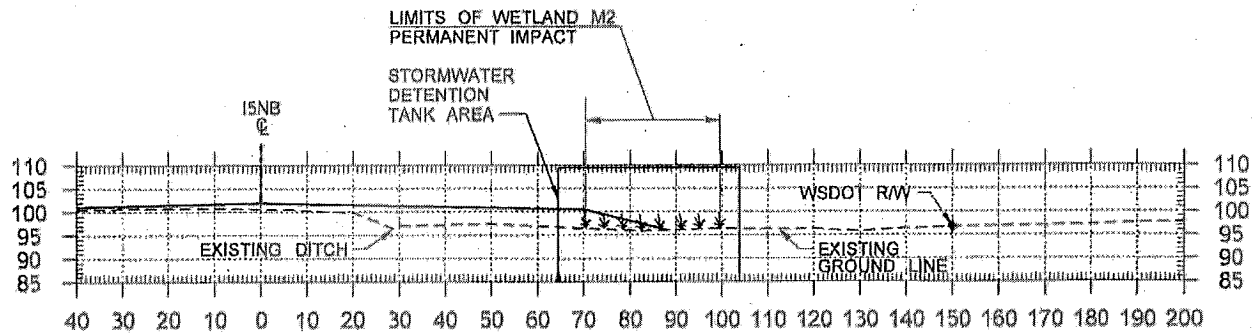


LEGEND:

- EXISTING NON-JURISDICTIONAL DITCH
- EXISTING JURISDICTIONAL DITCH
- EXISTING DRAIN PIPE
- EXISTING STORM SEWER LINE
- EXISTING CATCH BASIN
- EXISTING GRATE INLET
- EXISTING MANHOLE
- EXISTING EDGE OF ROADWAY
- EXISTING RETAINING WALL
- 0000000000 TAX PARCEL NUMBER
- PROPOSED EDGE OF ROADWAY
- CUT — PROPOSED EXCAVATION / CUT LIMITS
- FILL — PROPOSED FILL LIMITS
- CG — CG — PROPOSED CLEARING & GRUBBING LIMITS
- WSDOT RIGHT OF WAY LIMITS
- PROPOSED RETAINING WALL
- WETLAND
- PERMANENT WETLAND IMPACT
- TEMPORARY WETLAND IMPACT
- PERMANENT BUFFER IMPACT
- TEMPORARY BUFFER IMPACT
- LONG TERM TEMPORARY WETLAND IMPACT
- WETLAND BUFFER

N

0 50 100
SCALE IN FEET



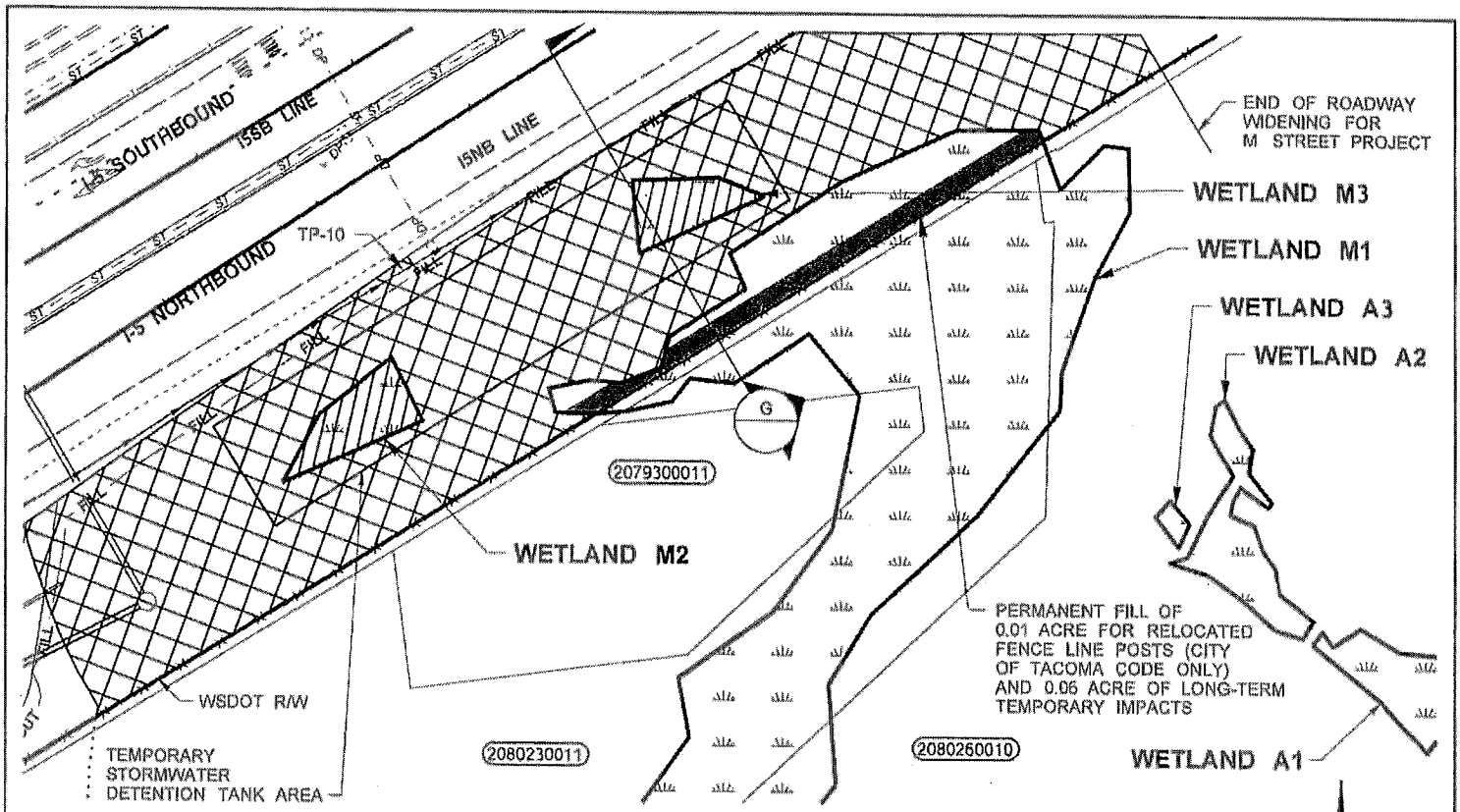
F SECTION - WETLAND M2 (I5NB LINE STA. 178+00)

PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE: NWS-2011-161-DOT
PROPOSED: I-5 M STREET TO PORTLAND AVENUE - HOV	APPLICANT: WSDOT
LOCATION: PIERCE COUNTY, WA - TACOMA, WA	COUNTY: PIERCE
DATUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A
LAT: 47°14'06" LONG: -122°28'29"	
	DATE: FEBRUARY 2013

Washington State Department of Transportation

SHEET: 9 OF: 10

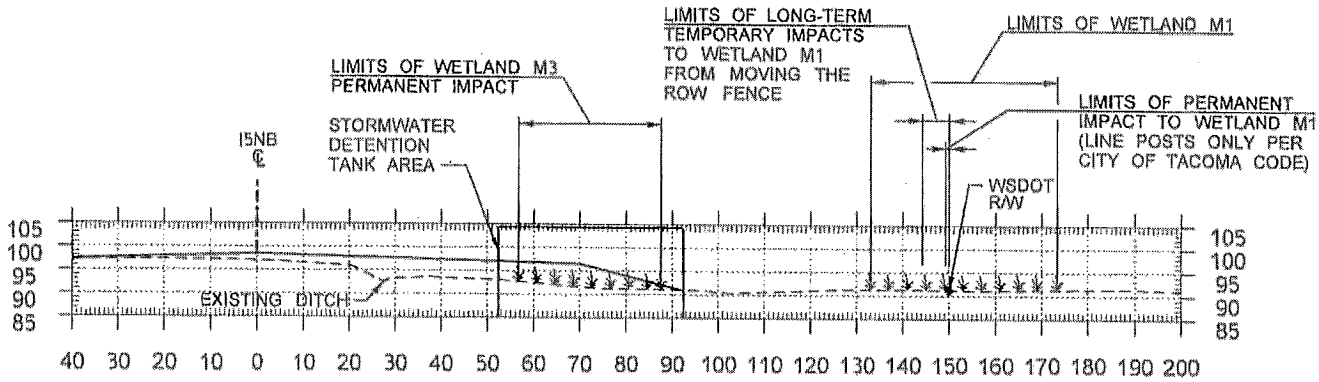
PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_09.dgn
7/2/2013
9:04:34 AM



LEGEND:

- EXISTING NON-JURISDICTIONAL DITCH
- EXISTING JURISDICTIONAL DITCH
- EXISTING DRAIN PIPE
- EXISTING STORM SEWER LINE
- EXISTING CATCH BASIN
- EXISTING GRATE INLET
- EXISTING MANHOLE
- EXISTING EDGE OF ROADWAY
- EXISTING RETAINING WALL
- TAX PARCEL NUMBER
- PROPOSED EDGE OF ROADWAY
- PROPOSED EXCAVATION / CUT LIMITS
- PROPOSED FILL LIMITS
- PROPOSED CLEARING & GRUBBING LIMITS
- WSDOT RIGHT OF WAY LIMITS
- PROPOSED RETAINING WALL
- WETLAND
- PERMANENT WETLAND IMPACT
- TEMPORARY WETLAND IMPACT
- PERMANENT BUFFER IMPACT
- TEMPORARY BUFFER IMPACT
- LONG TERM TEMPORARY WETLAND IMPACT
- WETLAND BUFFER

0 50 100
SCALE IN FEET



G SECTION - WETLANDS M1 & M3 (I5NB LINE STA. 180+00)

PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE: NWS-2011-161-PDT
PROPOSED: I-5 M STREET TO PORTLAND AVENUE - HOV	APPLICANT: WSDOT
LOCATION: PIERCE COUNTY, WA - TACOMA, WA	COUNTY: PIERCE
DATUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A
LAT: 47°14'06" LONG: -122°28'29"	
	DATE: FEBRUARY 2013

Washington State Department of Transportation

SHEET: 10 OF: 10

PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_10.dgn
7/2/2013
9:02:12 AM

APPENDIX BB

Section 401 Water Quality Certification – Department of Ecology

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

July 23, 2013

WA Department of Transportation
Attn: Carrie Berry
Tacoma/Pierce County HOV Office
P.O. Box 47376
Olympia, WA 98504-7376

RE: Water Quality Certification Order 10057 for Corps Public Notice NWS-2011-61 for the I-5 M Street to Portland Avenue HOV in City of Tacoma, Pierce County, Washington

Dear Ms. Berry:

On February 12, 2013, the Washington Department of Transportation (WSDOT), submitted a Joint Aquatic Resources Permit Application (JARPA) to the Department of Ecology (Ecology) for a Section 401 Water Quality Certification (401 Certification) under the federal Clean Water Act for the proposed for the I-5 M Street to Portland Avenue HOV project.

WSDOT is proposing to widen I-5 and add HOV lanes in both directions from Milepost 132.84 to Milepost 134.41 (M Street Vicinity to Portland Avenue Vicinity). Widening and adding HOV lanes will also entail the following:

- Reconstructing on and off ramps at the northbound and southbound I-5, I-705, and SR 7 interchanges;
- Demolition of existing bridges and construction of new bridges at Pacific Avenue and Mckinley Way;
- Construction of a new bridge on a new northbound I-5 alignment over I-705;
- Reconstructing city street approaches to the Pacific Avenue and McKinley Way bridges.

Other construction elements include building retaining walls and upgrades to stormwater facilities. The project will result in 0.75 acres of unavoidable permanent wetland impacts and 0.06 acre of long-term temporary wetland impacts. All permanent and long-term temporary wetland impacts will be mitigated at the Clear Creek-Riverside Advance Mitigation Site, where 1.01 acre of wetland re-establishment will be used.
On behalf of the State of Washington, Ecology certifies that the work described in the JARPA and the public notice complies with applicable provisions of Sections 301, 302,

303, 306 and 307 of the Clean Water Act, as amended and applicable state laws. This certification is subject to the conditions contained in the enclosed Order.

If you have any questions, please contact Penny Kelley at 360-407-7298. The enclosed Order may be appealed by following the procedures described in the Order.

Sincerely,

Brenden McFarland
Headquarters
Shorelands and Environmental Assistance Program

Enclosure

by Certified Mail 7010 2780 0000 2503 3600

e-cc: Sandi Manning, Corps of Engineers
Karla Kluge, City of Tacoma
Shelia Pendleton-Orme, Ecology
Sam Knox, Ecology
Victoria Book, WSDOT
Joanne Neugebauer-Rex, WSDOT
ecyrefedpermits@ecy.wa.gov

IN THE MATTER OF GRANTING A WATER QUALITY CERTIFICATION TO WA Department of Transportation in accordance with 33 U.S.C. 1341 (FWPCA § 401), RCW 90.48.120, RCW 90.48.260 and Chapter 173-201A WAC	)))))))	**ORDER # 10057** **Corps Reference No. NWS-2011-61** Widen I-5 and add HOV lanes in each direction. The project is located in Pierce County, Washington.

TO: Washington Department of Transportation
Attn: Carrie Berry
Tacoma/Pierce County HOV Office
P.O. Box 47376
Olympia, WA 98504-7376

On February 12, 2013, Ecology received a Joint Aquatic Resources Permit Application (JARPA) from the Washington Department of Transportation (WSDOT) and on July 8th WSDOT submitted an updated JARPA, requesting a 401 Water Quality Certification (WQC). The U.S. Army Corps of Engineers (Corps) issued a public notice for the project on February 27, 2013.

WSDOT is proposing to widen I-5 and add HOV lanes in both directions from Milepost 132.84 to Milepost 134.41 (M Street Vicinity to Portland Avenue Vicinity). Widening and adding HOV lanes will also entail the following:

- Reconstructing on and off ramps at the northbound and southbound I-5, I-705, and SR 7 interchanges;
- Demolition of existing bridges and construction of new bridges at Pacific Avenue and Mckinley Way;
- Construction of a new bridge on a new northbound I-5 alignment over I-705;
- Reconstructing city street approaches to the Pacific Avenue and McKinley Way bridges.

Other construction elements include building retaining walls and upgrades to stormwater facilities. The project will result in unavoidable permanent wetland impacts and temporary wetland impacts. All permanent wetland impacts will be mitigated at the Clear Creek Riverside advanced mitigation site. All temporary wetland impacts will be replanted upon project completion.

The project is located on I-5 starting at Milepost 132.84 and ending at Milepost 134.41 in the City of Tacoma/Pierce County WA.
WRIA 10 Puyallup-White
Section 8 T20N R3E
Section 9 T20N R3E
Section 10 T20N R3E

AUTHORITIES

In exercising authority under 33 U.S.C. § 1341, RCW 90.48.120, and RCW 90.48.260, Ecology has reviewed this application pursuant to the following:

1. Conformance with applicable water quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 U.S.C. §§1311, 1312, 1313, 1316, and 1317 (FWPCA §§ 301, 302, 303, 306 and 307);

2. Conformance with the state water quality standards contained in Chapter 173-201A WAC and authorized by 33 U.S.C. §1313 and by Chapter 90.48 RCW, and with other applicable state laws; and

3. Conformance with the provision of using all known, available and reasonable methods to prevent and control pollution of state waters as required by RCW 90.48.010.

WATER QUALITY CERTIFICATION CONDITIONS

Through issuance of this Order, Ecology certifies that it has reasonable assurance that the activity as proposed and conditioned will be conducted in a manner that will comply with applicable water quality standards and other appropriate requirements of state law. In view of the foregoing and in accordance with 33 U.S.C. §1341, RCW 90.48.120, RCW 90.48.260 Chapter 173-200 WAC and Chapter 173-201A WAC, water quality certification is granted to the Applicant subject to the conditions within this Order.

Certification of this proposal does not authorize WSDOT to exceed applicable state water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC) or sediment quality standards (Chapter 173-204 WAC). Furthermore, nothing in this certification absolves WSDOT from liability for contamination and any subsequent cleanup of surface waters, ground waters or sediments resulting from project construction or operations.

A. General Conditions

1. In this Order, the term "Applicant" shall mean the Washington State Department of Transportation and its agents, assignees, and contractors.

2. All submittals required by this Order shall be sent to Ecology's Headquarters Office, Attn: Federal Project Coordinator, P.O. Box 47600, Olympia, WA 98504 or via e-mail (preferred), if possible, to the Coordinator assigned to this project. The submittals shall be identified with Order No. 10057 and include the Applicant's name, project name, project location, the project contact and the contact's phone number.

3. Work authorized by this Order is limited to the work described in the JARPA received by Ecology on February 12, 2013. The Applicant will be out of compliance with this Order

and must submit an updated JARPA if the information contained in the JARPA is voided by subsequent changes to the project not authorized by this Order.

4. Within 30 days of receipt of any updated information, Ecology will determine if the revised project requires a new water quality certification and public notice or if a modification to this Order is required.

5. This Order shall be rescinded if the U.S. Army Corps of Engineers does not issue an individual Section 404 permit.

6. The Applicant shall send (per A.2.) a copy of the final individual Section 404 permit to Ecology's Federal Project Coordinator within two weeks of receiving it.

7. The Applicant shall keep copies of this Order on the job site and readily available for reference by Ecology personnel, the construction superintendent, construction managers and lead workers, and state and local government inspectors.

8. The Applicant shall provide access to the project site and all mitigation sites upon request by Ecology personnel for site inspections, monitoring, necessary data collection, and/or to ensure that conditions of this Order are being met.

9. Nothing in this Order waives Ecology's authority to issue additional orders if Ecology determines that further actions are necessary to implement the water quality laws of the state. Further, Ecology retains continuing jurisdiction to make modifications hereto through supplemental order, if additional impacts due to project construction or operation are identified (*e.g.*, violations of water quality standards, downstream erosion, etc.), or if additional conditions are necessary to further protect water quality.

10. The Applicant shall ensure that all project engineers, contractors, and other workers at the project site with authority to direct work have read and understand relevant conditions of this Order and all permits, approvals, and documents referenced in this Order. The Applicant shall provide Ecology a signed statement (see Attachment A for an example) from each signatory that s/he has read and understands the conditions of this Order and the above-referenced permits, plans, documents and approvals. These statements shall be provided to Ecology before construction begins.

11. This Order does not authorize direct, indirect, permanent, or temporary impacts to waters of the state or related aquatic resources, except as specifically provided for in conditions of this Order.

12. Failure of any person or entity to comply with the Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Order.

B. Notification Requirements

1. Notification shall be made via phone or e-mail (e-mail is preferred) to Ecology's Federal Project Coordinator. Notifications shall be identified with Order No. 10057 and include the Applicants name, project name, project location, project contact and the contact's phone number.

    a. Immediately following a violation of state water quality standards, spill to waters of the state or when the project is out of compliance with any of this Orders conditions.
        i. In addition to the phone or e-mail notification, the Applicant shall submit a detailed written report to Ecology within five (5) days that describes the nature of the event, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of any samples taken, and any other pertinent information.
    b. At least ten (10) days prior to all pre-construction meetings
    c. At least seven (7) days within project completion.
    d. At least 1 day prior to the preconstruction meeting regarding removal of the I-5/I705 interchange vaults.

C. Timing

1. This Order is valid until the Applicant meets all its requirements and conditions.

D. Water Quality Monitoring & Criteria

1. This Order does not authorize the Applicant to exceed applicable state water quality standards for turbidity as described in WAC 173-201A-200 (1)(e).

E. Construction

General Conditions

1. The Applicant shall comply with the conditions of the current Construction Stormwater Permit (National Pollutant Discharge Elimination System – NPDES) issued for this project.

2. Within the project limits[1] all environmentally sensitive areas including, but not limited to, wetlands, wetland buffers, and mitigation areas shall be fenced with high visibility construction (HVF) prior to commencing construction activities. Construction activities include equipment staging, materials storage, and work vehicle parking. *Note: This condition does not apply to activities such as pre-construction surveying and installing HVF and construction zone signage.*

[1] Project limits include mitigation sites, staging areas, borrow sources, and other sites developed or used to support project construction.

a. If the project will be constructed in stages[2] a detailed description and drawings of the stages shall be sent to Ecology for review at least 20 days prior to placing HVF.
b. Condition 2.a. shall apply to each stage.
c. All field staff shall be trained to recognize HVF, understand its purpose and properly install it in the appropriate locations.
d. HVF shall be maintained until all work is completed for each project or each stage of a staged project.

3. All clearing limits, stockpiles, staging areas, and trees to be preserved shall clearly be marked prior to commencing construction activities and maintained until all work is completed for each project.

4. No petroleum products, fresh concrete, lime or concrete, chemicals, or other toxic or deleterious materials shall be allowed to enter waters of the state.

5. All construction debris, excess sediment, and other solid waste material shall be properly managed and disposed of in an upland disposal site approved by the appropriate regulatory authority.

Equipment & Maintenance

6. Staging areas will be located a minimum of 50 feet and, where practical, 200 feet, from waters of the state including wetlands. If a staging area must be located within 50 feet of waters of the state, then the Applicant shall provide a written explanation and obtain approval from Ecology's Federal Permit Coordinator before placing the staging area in the setback area.

7. Equipment used for this project shall be free of external petroleum-based products while used around the waters of the state, including wetlands. Accumulation of soils or debris shall be removed from the drive mechanisms (wheels, tires, tracks, etc.) and the undercarriage of equipment prior to its use around waters of the state, including wetlands.

8. No equipment shall enter, operate, be stored or parked within any sensitive area except as specifically provided for in this Order or allowed in the HPA.

9. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into state waters.

10. Wash water containing oils, grease, or other hazardous materials resulting from wash down of equipment or working areas shall not be discharged into state waters. The Applicant shall set up a designated area for washing down equipment.

[2] A stage is part of a project that has been separated into at least two distinct areas to be built during separate timeframes.

11. A separate area shall be set aside, which does not have any possibility of draining to surface waters, for the wash-out of concrete delivery trucks, pumping equipment, and tools.

F. Wetlands

1. The Applicant shall mitigate wetland impacts as described in the *I-5: M Street to Portland Avenue – HOV Wetland Mitigation Plan* (hereafter called the "Mitigation Plan") prepared by Tacoma HOV Program WSDOT/GEC Wetlands Team, and dated July 2013, or as modified by this Order or revised and approved by Ecology.

2. The Applicant shall submit any changes to the Mitigation Plan in writing to Ecology (see A.2) for review and approval before work begins.

3. Until the Applicant has received written notice from Ecology that the Mitigation Plan has been fully implemented, the Applicant's obligation under Condition F.1 to mitigate for wetland impacts is not met.

G. Emergency/Contingency Measures

1. The Applicant shall develop and implement a spill prevention and containment plan for this project and shall have spill cleanup material available on site at all times during construction.

2. Work that is out of compliance with the provisions of this Order, conditions causing distressed or dying fish, discharges of oil, fuel, or chemicals into state waters or onto land with a potential for entry into state waters, is prohibited. If such work, conditions, or discharges occur, the Applicant shall comply with WSDOT's most current Environmental Compliance Assurance Procedure for Construction Project and Activities, notify the Ecology Project Coordinator per condition B.1.a. and immediately take the following actions:

    a. Cease operations at the location of the non-compliance.
    b. Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage.
    c. In the event of a discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, containment and cleanup efforts shall begin immediately and be completed as soon as possible, taking precedence over normal work. Cleanup shall include proper disposal of any spilled material and used cleanup materials.

    d. Immediately notify Ecology's Regional Spill Response Office at 360-407-6300 and the Washington State Department of Fish & Wildlife the nature and details

of the problem, any actions taken to correct the problem, and any proposed changes in operation to prevent further problems.

e. Immediately notify the National Response Center at 1-800-424-8802, for actual spills to water only.

3. Notify Ecology's Regional Spill Response Office immediately if chemical containers (e.g. drums) are discovered on-site or any conditions present indicating disposal or burial of chemicals on-site that may impact surface water or ground water.

YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do all of the following within 30 days of the date of receipt of this Order:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 **Pollution Control Hearings Board** 1111 Israel RD SW STE 301 Tumwater, WA 98501	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 **Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

CONTACT INFORMATION

Please direct all questions about this Order to:

Penny Kelley
Department of Ecology
P.O. Box 47600
Olympia, WA 98503-7600

360-407-7298
pkel461@ecy.wa.gov

MORE INFORMATION

- **Pollution Control Hearings Board Website**
  www.eho.wa.gov/Boards_PCHB.aspx
- **Chapter 43.21B RCW - Environmental and Land Use Hearings Office – Pollution Control Hearings Board**
  http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21B
- **Chapter 371-08 WAC – Practice And Procedure**
  http://apps.leg.wa.gov/WAC/default.aspx?cite=371-08
- **Chapter 34.05 RCW – Administrative Procedure Act**
  http://apps.leg.wa.gov/RCW/default.aspx?cite=34.05
- **Chapter 90.48 RCW – Water Pollution Control**
  http://apps.leg.wa.gov/RCW/default.aspx?cite=90.48
- **Chapter 173.204 Washington Administrative Code (WAC) Sediment Management Standards**
  http://www.ecy.wa.gov/biblio/wac173204.html
- **Chapter 173-200 WAC Water Quality Standards for Ground Waters of the State of Washington**
  http://www.ecy.wa.gov/biblio/wac173200.html
- **Chapter 173-201A WAC Water Quality Standards for Surface Waters of the State of Washington**
  http://www.ecy.wa.gov/biblio/wac173201A.html

SIGNATURE

Dated this 23rd day of July 2013 at the Department of Ecology, Lacey Washington

Brenden McFarland, Section Manager
Environmental Review and Transportation
Shorelands and Environmental Assistance Program
Headquarters

Attachment A

Water Quality Certification Order #10057
Statement of Understanding

I, _____, state that, I will be involved as a WSDOT employee or an agent or contractor for Washington State Department of Transportation on the I-5 M Street to Portland Avenue HOV project in Pierce County, WA. I further state that I have read and understand the relevant conditions of Washington Department of Ecology **Water Quality Certification Order # 10057** and the applicable permits and approvals referenced therein which pertain to the project-related work for which I am responsible.

_____ _____

Signature Date

_____ _____

Company Phone number

_____

Address

_____

City, State, and Zip Code

APPENDIX BB

APPENDIX CC

Coastal Zone Management Consistency Certification – Department of Ecology

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

July 23, 2013

Washington Department of Transportation
Attn: Carrie Berry
Tacoma/Pierce County HOV Office
P.O. Box 47376
Olympia, WA 98504-7376

RE: Coastal Zone Management Consistency Determination for I-5 M Street to Portland Avenue HOV in the City of Tacoma, Pierce County, Washington.

Dear Ms. Berry:

On February 12, 2013 the Washington Department of Transportation (WSDOT) submitted a Federal Consistency Determination stating that the above project is consistent with the Washington State Coastal Zone Management Program (CZMP). Pursuant to Section 307(c)(3) of the Coastal Zone Management Act of 1972 as amended, the Department of Ecology (Ecology) concurs with WSDOT's determination that the proposed work is consistent with Washington's CZMP.

You have a right to appeal this determination to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Decision. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001 (2).

To appeal you must do the following within 30 days of the date of receipt of this Decision:

File your appeal and a copy of this Determination with the PCHB (see addresses below).
Filing means actual receipt by the PCHB during regular business hours.

Serve a copy of your appeal and this Determination on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 **Pollution Control Hearings Board** 1111 Israel Road SW STE 301 Tumwater, WA 98501	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 **Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

Please direct all questions about this determination to:

Penny Kelley
Department of Ecology
P.O. Box 47600
Olympia, WA 98503-7600

360-407-7298
pkel461@ecy.wa.gov

For additional information visit the Environmental Hearings Office Website:
http://www.eho.wa.gov

To find laws and agency rules visit the Washington State Legislature Website:
http://www1.leg.wa.gov/CodeReviser

Pollution Control Hearings Board Website
www.eho.wa.gov/Boards_PCHB.aspx

Chapter 43.21B RCW - Environmental Hearings Office – Pollution Control Hearings Board
http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21B

July 23, 2013

Brenden McFarland, Section Manager
Environmental Review and Transportation
Shorelands and Environmental Assistance Program
Headquarters

Date

by Certified Mail 7010 2780 0000 2503 3617

e-cc: Sandi Manning, Corps of Engineers
Karla Kluge, City of Tacoma
Shelia Pendleton-Orme, Ecology
Victoria Book, WSDOT
Joanne Neugebauer-Rex, WSDOT
ecyrefedpermits@ecy.wa.gov

APPENDIX CC

APPENDIX DD

NPDES Industrial Stormwater Permit for Construction Activities

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

December 16, 2013

Carrie M Berry
Washington State Dept of Transportation
PO Box 47376
Olympia, WA 98504-7376

RE: Coverage under the Construction Stormwater General Permit

Permit number:	**WAR301303**
Site Name:	**WA DOT I-5 M St to Portland Ave HOV**
Location:	**I-5 M st to Portland Ave**
	Tacoma, WA County: Pierce
Disturbed Acres:	**19.076**

Dear Ms. Berry:

The Washington State Department of Ecology (Ecology) received your Notice of Intent for coverage under Ecology's Construction Stormwater General Permit (permit). This is your permit coverage letter. Your permit coverage is effective on December 16, 2013. **Please retain this permit coverage letter with your permit (enclosed), stormwater pollution prevention plan (SWPPP), and site log book. These materials are the official record of permit coverage for your site.**

Please take time to read the entire permit and contact Ecology if you have any questions.

Appeal Process
You have a right to appeal coverage under the general permit to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this letter. This appeal is limited to the general permit's applicability or non-applicability to a specific discharger. The appeal process is governed by chapter 43.21B RCW and chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal, you must do the following within 30 days of the date of receipt of this letter:

- File your appeal and a copy of the permit cover page with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and the permit cover page on Ecology in paper form - by mail or in person (see addresses below). E-mail is not accepted.

You must also comply with other applicable requirements in chapter 43.21B RCW and chapter 371-08 WAC.

Address and Location Information:

Street Addresses:	**Mailing Addresses:**
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board (PCHB) 1111 Israel Road SW, Suite 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

Electronic Discharge Monitoring Reports (WQWebDMR)
This permit requires that Permittees submit monthly discharge monitoring reports (DMRs) electronically using Ecology's secure online system, WQWebDMR. To sign up for WQWebDMR go to: www.ecy.wa.gov/programs/wq/permits/paris/webdmr.html. If you have questions, contact Tonya Wolfe at (360) 407-7097 (Olympia area), or (800) 633-6193/option 3, or email WQWebPortal@ecy.wa.gov.

Ecology Field Inspector Assistance
If you have questions regarding stormwater management at your construction site, please contact Deborah Cornett of Ecology's Southwest Regional Office in Lacey at deborah.cornett@ecy.wa.gov, or (360) 407-7269.

Questions or Additional Information
Ecology is committed to providing assistance. Please review our web page at: www.ecy.wa.gov/programs/wq/stormwater/construction/. If you have questions about the construction stormwater general permit, please contact Josh Klimek at josh.klimek@ecy.wa.gov, or (360) 407-7451.

Sincerely,

Bill Moore, P.E., Manager
Program Development Services Section
Water Quality Program

Enclosure

APPENDIX EE

Compliance Implementing Agreement (2004)

COMPLIANCE
IMPLEMENTING AGREEMENT
Between
THE WASHINGTON STATE
DEPARTMENT OF ECOLOGY
And
THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

REGARDING COMPLIANCE WITH THE STATE OF WASHINGTON
SURFACE WATER QUALITY STANDARDS
November 1, 2004

THIS COMPLIANCE IMPLEMENTING AGREEMENT is being adopted by the Washington State Department of Ecology (Ecology), and the Washington State Department of Transportation, (WSDOT) to assist both agencies in obtaining and maintaining compliance on Ecology issued permits, Orders, Certifications, approvals, implementing agreements, and with the State of Washington Water Quality Standards. This CIA defines elements that are necessary to increase compliance for WSDOT and WSDOT hired contractors.

TERMS AND CONDITIONS:

Ecology and WSDOT agree to implement the following requirements of this Agreement:

A. **WSDOT shall** develop a statewide compliance program by December 31st, 2004 to include or address the following:

1. Improved compliance with all water quality laws, Ecology Interagency Agreements, 401 Water Quality Certifications and 402 Construction Stormwater Permits.

2. Assurance that all environmentally sensitive areas, mitigation areas, and wetland buffers, are fenced as a first order of work. Clearly delineate sensitive areas, mitigation areas and wetland buffers, fencing requirements, 401 Water Quality Certification conditions, and NPDES permit conditions in contract provisions and/or plan sheets as appropriate. Maintain fencing requirements throughout construction.

3. A requirement that an Environmental Inspector, trained in maintaining compliance with 401 Water Quality Certification conditions and NPDES permit requirements, mitigation requirements, and WSDOT's compliance procedures, be assigned, and/or available to, all project sites to ensure compliance with 401 Water Quality Certification conditions and NPDES permit conditions through construction completion and site stabilization.

4. A requirement for WSDOT Project Engineers to notify Ecology ten calendar days prior to commencing any work, excluding construction fencing, in environmentally sensitive areas, mitigation areas, and wetland buffers.

5. A requirement for WSDOT Project Engineers to consult with the WSDOT Environmental Inspectors to ensure that the proposed work in environmentally sensitive areas, mitigation areas, and wetland buffers is in compliance with permit

conditions. If it is determined that the proposed work is not in compliance with the permit conditions, then the resource agencies shall be notified prior to commencing work in these areas.

6. A requirement for the Contractor to submit a detailed work plan to be approved by the WSDOT Project Engineer, in consultation with the WSDOT Environmental Inspector and/or regional environmental representative prior to the onset of any work in sensitive areas and mitigation sites, and that all work in wetland mitigation areas, be verified by WSDOT to ensure the contractor has met all permit conditions.

7. Development and implementation of a commitment tracking system to identify all project commitments made during planning, NEPA/SEPA, design, and permitting. All project commitments shall be clearly communicated to the contractor, construction project office staff, and supporting design offices.

8. Assurance that all environmental commitments have been achieved prior to the completion of the project, and that WSDOT's Maintenance and Operations staff have received a copy of and understand all long-term compliance expectations, including mitigation site monitoring and maintenance, for the project site.

9. Track and report non-compliance events for periodic assessment of statewide compliance performance for maintenance, construction, and ferry service operations

B. Ecology and WSDOT Shall:

1. Commit to jointly assess existing agency workloads and staffing requirements to ensure project delivery and compliance priorities are met. Work priorities, responsibilities, and staffing levels will be aligned to meet these needs.

2. Work together to review non-compliance events in order to evaluate progress and improvements needed for the Compliance Program.

This Compliance Implementing Agreement is effective upon the date of signature below. This Agreement contains all the terms and conditions agreed upon by the parties. No other understandings, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind either of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this Compliance Implementing Agreement as of the day and year first above written.

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

Douglas B. MacDonald, DATE 11/2/04

Douglas B. MacDonald, Secretary
Washington State Dept. of Transportation

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Linda Hoffman, DATE 11/5/04

Linda Hoffman, Director
Washington State Department of Ecology

APPENDIX FF

Critical Area Ordinance Permit

City of Tacoma
Planning and Development Services
Report And Decision

WETLAND DEVELOPMENT PERMIT **FILE NO: WET2013-40000196124**

Applicant:
Carrie Berry
Washington State Department of Transportation
Pierce County HOV Program
P.O. Box 47376
Olympia, WA 98504-7376

SUMMARY OF REQUEST

Proposal:

A Wetland Development Permit as allowed under the Critical Areas Preservation Ordinance (CAPO) set forth under the *Tacoma Municipal Code (TMC)* Chapter 13.11 to widen and realign southbound and northbound I-5 and construct two additional high-occupancy (HOV) lanes in both directions along 1.57 miles between "M" Street and Portland Avenue. Wetland and their buffers along this route will be impacted by the project. Wetland buffer impacts will be mitigated on site within Wetland M1 and remaining impacts will be mitigated off-site at a previously approved advanced mitigation site at Clear Creek-Riverside Mitigation Site. The proposed project is one component of the broader Tacoma/Pierce County HOV System, which WSDOT plans to develop stepwise in 22 separate projects. The components and associated improvements of the I-5 M Street to Portland Avenue-HOV project are currently proposed to increase the safety and efficiency along this segment of the I-5 corridor.

Location:

The site is located within WSDOT I-5 right of way between "M" Street and Portland Ave.

Decision:

Approved, subject to conditions.

Note:

The appeal period on this decision closes September 23, 2013.

The effective date of this decision is September 26, 2013, provided no requests for reconsideration or appeals are timely filed as identified in the "APPEAL PROCEDURES" section of this report and decision.

FOR ADDITIONAL INFORMATION CONCERNING THIS LAND USE PERMIT PLEASE CONTACT:

Karla Kluge, (253) 591-5773
Senior Environmental Specialist
Planning and Development Services Department
747 Market Street, Room 345
Tacoma, WA 98402
Email: kkluge@ci.tacoma.wa.us

SUMMARY OF RECORD

The following exhibits and attachments constitute the administrative record:

Attachments:

Attachment "A": Vicinity Maps
Attachment "B": Site Plans of project sites and impacted wetlands
Attachment "C": Site Plans of mitigation site

Exhibits[1]:

Exhibit "A": Joint Aquatic Resources Permit Application and related correspondence
Exhibit "B": Tacoma/Pierce County HOV Program, Wetland Assessment Report October 31, 2008
Exhibit "C": Jurisdictional Ditch Analysis Technical Memorandum, WSDOT, December 2010
Exhibit "D": SEPA Determination
Exhibit "E": Historic, Cultural, and Archaeological Resources Discipline Report, CH2MHill, August 2009
Exhibit "F": Wetland Mitigation Accounting Framework Clear Creek-Riverside Site, WSDOT, August 26, 2010
Exhibit "G": I-5: M Street to Portland Ave. – HOV Wetland Mitigation Plan, WSDOT, July 2013
Exhibit "H": Wetland Delineation Forms, Herrera Environmental Consultants
Exhibit "I": Wetland Rating Forms
Exhibit "J": Agency Comments
Exhibit "K": Public Comments
Exhibit "L": Technical Memorandum for WET2013-40000196124 by the City's SES, August 16, 2013
Exhibit "M": Applicable Regulations

The Director enters the following Findings of Fact and Conclusions of Law based upon the applicable criteria and standards set forth in the *TMC*, the policies of the *Comprehensive Plan*, and the Attachments and Exhibits listed above.

FINDINGS OF FACT

Proposal:

1. A Wetland Development Permit as allowed under the *Critical Areas Preservation Ordinance (CAPO)* set forth under the *Tacoma Municipal Code (TMC)* Chapter 13.11 to widen and realign southbound and northbound I-5 and construct two additional high-occupancy (HOV) lanes in both directions along 1.57 miles between "M" Street and Portland Avenue. Wetland and their buffers along this route will be impacted by the project. All wetland and buffer impacts will be mitigated on site within Wetland M1 and remaining impacts will be mitigated off-site at a previously approved advanced mitigation site at Clear Creek-Riverside Mitigation Site. The proposed project is one component of the broader Tacoma/Pierce county HOV system, which WSDOT plans to develop stepwise in 22 separate projects. The components and associated

[1] All Exhibits referenced in this Decision are included in the Planning and Development Services File No. WET2013-400000196124 as exhibits for this proposal and are fully incorporated herein by reference.

improvements of the I-5 M Street to Portland Avenue-HOV project are currently proposed to increase the safety and efficiency along this segment of the I-5 corridor.

2. The project would accomplish the following:
    - Reconstruction of main line I-5 northbound and southbound, including additional HOV Lanes.
    - Reconstruction of on-and off-ramps at the northbound and southbound I-5/I-705/SR7 interchange
    - Demolition of existing bridges and reconstruction of new bridges at Pacific Avenue and McKinley Way
    - Construction of a new bridge on a new northbound I-5 alignment over I-705
    - Reconstruction of city street approaches to Pacific Avenue and McKinley Way bridges
    - Construction of retaining walls
    - Upgrades to signing, illumination storm water collection facilities and water quality treatment facilities
    - Removal of three concrete lined vaults located within the I-705 interchange containing contaminated soils.
3. WSDOT and the HOV program have recognized the need to improve traffic flow and increase traffic safety by constructing HOV lanes to maximize the traffic capacity of the I-5 System in Pierce County. Washington needs these projects because increasing congestion and projected population growth in the area have raised concern about mobility for transit, HOV's and freight, and about safety along the I-5 corridor, which is an important international and regional interstate highway. The proposed action would design and construct southbound and northbound HOV lanes on I-5, improve ramp alignments, and add auxiliary lanes.
4. Within Pierce County, I-5 is a multilane highway connecting the region's urban centers, such as Olympia, Lakewood, Tacoma, Federal Way, Seattle, Lynnwood, and Everett. I-5 is a key freight corridor, linking the Port of Tacoma to markets in the Puget Sound region and beyond. I-5 is also a critical transportation corridor for defense, linking Fort Lewis and McChord Air Force Base to cities and ports in western Washington. WSDOT, the HOV program, and its partners have recognized the need to improve traffic flow and increase traffic safety by constructing HOV lanes to maximize the people-carrying capacity of the I-5 system in Pierce County.
5. The proposed project will have unavoidable permanent impacts to seven of the wetlands for a total of 0.75 acre and have long term temporary impacts to 0.06 acre. Project impacts will occur to mostly palustrine emergent and forested Category IV slope and Category III depressional wetlands that are located within the roadside right of way along I-5. Minor impacts will occur to a palustrine forested, depressional/slope Category II wetland buffer. All wetland impacts will occur along the project limits within the right-of-way corridor. All permanent direct impacts will occur within the City of Tacoma. Refer to Attachments "A" and "B".
6. Approximately 3266 cubic yards of fill will be placed in the impacted wetlands for this project using a backhoe or excavator. The breakdown of fill in each wetland is as follows: 1130 cubic yards of fill in Wetland M2, 905 cubic yards of fill in Wetland M3, 350 cubic yards of fill in Wetland O, 1.0 cubic yards for fill in Wetland Q, and 880 cubic yards of fill in Wetlands. Wetland M1 will have a limited fill amount of 0.46 square feet or 0.01 acre for calculation of mitigation.

7. Approximately 7915 cubic yards of native fill will be removed in the impacted wetlands for this project using a backhoe or excavator along the roadway corridor. The breakdown of excavation in each wetland is as follows: 1130 cubic yards of fill in Wetland M2, 905 cubic yards of fill in Wetland M3, 3820 cubic yards from Wetland O, 970 cubic yards form Wetland P, 30 cubic yards from Wetland Q, and 1060 cubic yards from Wetland S. These excavations are necessary to prepare the site for storm water management and to build the roadway prism.
8. Wetlands M2, M3, Wetland O and Wetland P will be completely impacted through fill and excavation and will be mitigated in their entirety at the Clear Creek – Riverside Mitigation site. Wetland Q and Wetland S will also be permanently impacted; however, the impacts are partial and will not result incomplete wetland loss. Wetland M1, a Category II wetland, will have a small impact of 0.000011 acre (0.46 square feet) for the line posts along the relocated right-of-way fence. This value is rounded up to 0.01 acres for calculation and mitigation purposes. Long-term permanent and temporary impacts to the buffer of M1 will occur when removing trees for the installation of the relocated right-of-way fence along the correct surveyed right-of-way line. The site (M1) will be replanted and the impacts mitigated for at the CCR Site at one-quarter of the years mitigation ratio. Refer to Attachment "B".
9. The proposed mitigation for the project is at an off-site, approved advanced mitigation site known as the Clear Creek-Riverside Mitigation site. With the exception of restoration in Wetland M1, the mitigation plan is proposed to consolidate, compensate, and mitigate for wetland, stream, and floodplain impacts in advance of multiple future WSDOT roadway projects. Mitigation at CCR re-established wetlands, restored riparian conditions along Clear Creek, established a 100-foot-wide mitigation buffer to protect the functions of the site, managed noxious weeds, planted native vegetation throughout the site, installed downed logs and snags to improve habitat, and constructed a backwater channel to provide flood storage and off-channel habitat. Refer to Attachment "C".

Project Site:

10. The subject site is located on Interstate 5 from just east of the "M" Street underpass to west of the Portland Avenue Interchange (I-5 Milepost 132.84 to 134.41). Areas bordering the site include areas zoned M1-Light Industrial, STGPD South Tacoma Groundwater Protection District, ST-M/C south Tacoma Manufacturing/Industrial Center; R3 Two Family Dwelling, STGPD South Tacoma Groundwater Protection District; R3 Two Family Dwelling; C2 Commercial; R4 Multi-Family Dwelling; WR Warehouse Residential; M1 Light Industrial; R4L Low Density Multiple-Family Home; R3 Two Family Dwelling; R2 SRD One Family Dwelling Special Review, STGPD South Tacoma Groundwater Protection District.
11. The Generalized Land Use Element (GLUE) of the City's *Comprehensive Plan* locates the site within three land use intensity areas; "Low", "Medium" and "High" and primarily within a Tier 1-Primary Growth Area, with one area designated as Tier 2-Secondary Growth area at the McKinley Park area.
12. The project site is situated in an urban and semi-urban environment. Vegetation within the project area is located along both sides of the highway and within highway median area. Upland vegetation areas in the WSDOT right of way are heavily disturbed, fragmented and/or isolated from other habitats in the area. Vegetation includes black cottonwood, Douglas fir, red alder, sword fern, various grasses, and invasives such as Himalayan blackberry, Scot's broom and reed canarygrass.

13. In the late 1800's and early 1900's, the primary transportation corridors were South Tacoma Way, Puyallup Avenue, and Pacific Highway (the latter two roads are now referred to as Highway 99). In the period from the early 1900's through the 1950s, a coal/fuel supply yard and railroad freight yards were developed along the Puyallup Avenue, west of the Puyallup River. From the 1940's to the present, small neighborhood gasoline service stations, automobile repair series, and rug and dry cleaning facilities were developed at scattered locations throughout the residential area south of Tacoma.
14. From the early 1900's to the mid-1960s, the upland residential area along most of the western portion of the project limits and large parcels of farmlands southeast of the project area were developed. Other commercial and industrial businesses were developed from the 1960's until the present time, including truck motor freight businesses and repair services, machine and welding shops, commercial and industrial business parks, gasoline stations, restaurants and motor vehicle dealerships.
15. Twelve wetlands were identified on or adjacent to the project site. These wetlands were comprised of one Category II wetland, eight Category III wetlands, and three Category IV wetlands. Vegetation and habitat in the project area have been heavily affected by urbanization and an extensive transportation infrastructure. As a result, most habitats in the project area are limited to small patches of forested area and areas dominated by shrubs and grasses. An exception to this is a small portion of intact habitat of 0.2 acre in McKinley Park on the south side ode of the I-5 corridor that lies within the project limits. Although heavily disturbed, most of the habitats along I-5 offer foraging habitat, next sites and cover for small mammals, birds, and their predators. Refer to Attachment "A".
16. Species in the vicinity of the project as a whole (I-5 HOV project) include federal Endangered Species Act are Chinook salmon, Bull trout, steelhead, Killer whale, and the Stellar sea lion. The Biological Opinions of March and April 2009 states that the Endangered Species Act Section 7 consultation and Magnuson-Stevens Fisheries Conservation and Management Act will not be required for the I-5 M Street to Portland Ave-HOV project as there will be no effect to listed species from construction activities. The national Marine Fisheries Service and US Fish and Wildlife Service both issued Biological Opinion regarding listed species in the vicinity of the project. No Endangered or threatened species occur along this portion of the highway corridor.

Surrounding Area:

17. The areas bordering the site include areas zoned M1-Light Industrial, STGPD South Tacoma Groundwater Protection District, ST-M/C south Tacoma Manufacturing/Industrial Center; R3 Two Family Dwelling, STGPD South Tacoma Groundwater Protection District; R3 Two Family Dwelling; C2 Commercial; R4 Multi-Family Dwelling; WR Warehouse Residential; M1 Light Industrial; R4L Low Density Multiple-Family Home; R3 Two Family Dwelling; R2 SRD One Family Dwelling Special Review, STGPD South Tacoma Groundwater Protection District.
18. The Generalized Land Use Element (GLUE) of the City's *Comprehensive Plan* locates the site within three land use intensity areas; "Low", "Medium" and "High" and primarily within a Tier 1-Primary Growth Area, with one area designated as Tier 2-Secondary Growth area at the McKinley Park area.

Additional Information:

19. The City determined that the Wetland/Stream Development Permit application was complete on February 11, 2013. This permit is being reviewed under the *Critical*

Areas Preservation Ordinance (CAPO) set forth under the *Tacoma Municipal Code (TMC)* Chapter 13.11.

20. The applicant provided revised and updated excerpts from the *Wetland and Stream Assessment Report*, Chapters 3, 4, 5, and 6, and an updated Jurisdictional Ditch Analysis Technical Memorandum, December 2010 to document wetland and buffer presence as well as the methodology and results of their survey. WSDOT's original wetland inventory and assessment work for the proposed project (DEA 1995) was considered out of date for the purposes of the proposed project application. The wetland information, including wetland delineation, classifications and ratings, were updated and field verified in 2013 by the applicant's consultants for this portion of the project (Refer to Exhibits "B" and "C").
21. The re-delineation of wetlands along the perimeter of I-5 identified seven wetlands within the project area described for the WSDOT HOV project. Three of those wetlands (Wetland M1, Wetland M2, and Wetland M3) are associated with the McKinley Park area. The remaining wetlands (Wetland O, Wetland P, Wetland Q, and Wetland S) lie along the perimeter of I-5.
22. The applicant provided an explanation detailing how the project meets the Reasonable Use Test, one of three acceptable legal tests in *TMC* 13.11.240.
23. The applicant's justification for the mitigative hierarchy analysis was completed as required by *TMC* Sections 13.11.270 and 13.11.340. The applicant conducted an extensive screening process related to the selection of the Clear Creek Mitigation site for WSDOT projects associated with I-5 HOV program and State route 167. The applicant has adequately addressed the process of avoidance, minimization, and mitigation to the extent practicable for the project, and has provided a Legal Test justification for the Reasonable Use Test. WSDOT has demonstrated that it cannot avoid the impacts to the wetlands and buffers due to the linear nature of project and subsequent limited options.
24. The proposed project will result in no net loss of wetland or wetland buffer and will actually provide a higher level of wetland functions. Although a portion of the proposed mitigation for wetland loss is off-site, it is located within the same drainage sub-basin of the lower Puyallup River, it will provide a higher level of functions, and provides a high likelihood of success for current and future mitigation needs. The proposed wetland and buffer mitigation will not only replace similar functions as those lost, but will provide a functional lift higher than the original wetlands impacted and the value of the vegetated area will also provide enhanced habitat and an aesthetic value to the areas surrounding the mitigation area.
25. The mitigation proposed utilizes an advance mitigation site in its third year of monitoring that currently demonstrates successful mitigation implementation and healthy vegetation and animal and fish use at the site. Under *TMC 13.11.340* innovative mitigation, WSDOT proposes to utilize accounting assumptions for calculation purposes at the Clear Creek - Riverside Mitigation site. These mitigation assumptions were evaluated by the City's Senior Environmental Specialist (SES) and found to be compliant with the *TMC* 13.11. Refer to Exhibit "L".
26. The City's Senior Environmental Specialist (SES) conducted an extensive review of the proposed project, and has presented her analysis of the project in Technical Memorandum dated August 16, 2013 (Exhibit "I"). The SES concurred with the wetland delineation, wetland category, and wetland buffer for the onsite wetlands. In addition, the SES has also indicated the proposal met the Reasonable Use Test under *TMC* 13.11.240 and that the applicant has provided an appropriate mitigative analysis

including five years of monitoring for the tree replacement and 10 years (total) monitoring of the Clear Creek - Riverside Mitigation site. Refer to Exhibit "L".

27. The SES is one of the City's experts on wetlands, streams and other critical areas issues and her opinion relative to the subject request should be afforded considerable weight in this matter.
28. In accordance with WAC 197-11-610, the Washington State Department of Transportation, acting as lead agency for the environmental review, adopted their NEPA review to satisfy SEPA requirements. WSDOT conducted an Environmental Assessment (EA) and issued a Finding of No Significant Impact in 1999, and subsequently conducted a supplemental EA in 2009. Again, a FONSI was issued.
29. The *Comprehensive Plan* provides the following policy guidance for development within in wetlands and their associated buffers:

E-WS-1 Preservation of Wetland
Strive to preserve and maintain desirable small bodies of water or wetlands such as holding basins, creeks, stream corridors and marshes for open space, flood control, drainage, water quality, aquifer recharge and habitat purposes. (Environmental Policy Element, page E-17)

E-WS-2 No Net Wetland Loss
Ensure that in the short term there is no net loss of wetland, stream, and aquatic habitat functions and acreage and, in the long term, there is a measurable gain of wetland, stream and aquatic habitat function and acreage. (Environmental Policy Element, page E-17)

E-WS-3 Wetland Protection
Ensure that new development adjacent to a wetland preserve, protect and improve the wetland and provide vegetated habitat or buffer adjacent to the wetland adequate to protect its natural functions. (Environmental Policy Element, page E-17)

E-WS-5 Wetland Filling/Draining
Prohibit indiscriminate filling or draining of wetlands and stream corridors. (Environmental Policy Element, page E-18)

Notice and Comments:

30. The project proposal was transmitted to several reviewing agencies for review and comment on February 20, 2013. Comments from reviewing agencies are marked as Exhibit "J" to this report and decision.
31. In a letter dated March 21, 2013, Merita Trohimovich, Environmental Services Engineering Division provided conditional comments regarding stormwater runoff. Ms. Trohimovich advises that if connections are made with the City of Tacoma stormwater system, all applicable regulations and requirements shall be adhered to and mitigation provided where required. Refer to Exhibit "J".
32. Remaining responses received from Dan Sully, Planning and Development Services Department, Joshua Diekman, Public Works, Jesse Angel, Tacoma Water, and Brad Harp, Tacoma-Pierce County Health Department were marked "no comment" or "no objection". Refer to Exhibit "J".
33. Public Notice of this land use application was sent to all owners of property within 400 feet of the site, the neighborhood council, and qualified neighborhood groups on

February 20, 2013, allowing at least 30 days to comment. Seven public information signs were posted at the site within 7 days of the Revised Public Notice.

34. One comment was received during the public comment period. A letter from the Puget Creek Restoration Society requested that the proposal incorporate long term monitoring of invasive plants and implementing enhancement components to heighten the function of mitigation wetland. Refer to Exhibit "K".
35. The City responds that WSDOT will continue to monitor the "M1" Wetland for a period of 5 years, and the Clear Creek Riverside Mitigation site for a total of 10 years. The monitoring aspect of the mitigation plan includes maintenance of each site and the removal of invasive species.

Finding of Fact as Conclusion of Law:

36. Any Finding of Fact later deemed to be a Conclusion of Law is hereby adopted as such.

CONCLUSIONS OF LAW

Jurisdiction:

1. The Planning and Development Services Director has jurisdiction in this matter. See *TMC* 13.05.030.

Burden of Proof:

2. The applicant bears the burden of proof to demonstrate the proposal's consistency with the applicable policies of the *Comprehensive Plan*, specifically the Environmental Policy Element of the *Comprehensive Plan*, and its implementing regulations set forth in *TMC* Chapter 13.11, and with other applicable City ordinances.

Applicable Regulations:

3. Development and enhancement activities within wetlands, streams and their associated regulated buffers are subject to the provisions of the City's *CAPO*, *TMC* Chapter 13.11, and the policy guidance set forth in the Environmental Element of the City's *Comprehensive Plan*. The applicable regulations are marked as Exhibit "M" to this report and decision.
4. Procedural requirements for Wetland Development permits are subject to provisions of the City's Land Use Permit Procedures, *TMC* Chapter 13.05.
5. *TMC* Section 13.11.220.A requires that the Director issue a permit decision for projects that may adversely impact wetlands, streams, or their buffers. To approve a Wetland Development Permit, the Director must conclude that the applicant has: (a) satisfied one of three legal tests in *TMC* Section 13.11.240 and (b) provided appropriate mitigation in accordance with *TMC* Sections 13.11.270 and 13.11.340.
6. Wetland Development Permits may be granted provided certain findings are made:
    - One of the following legal tests is met:
        - There is no practicable alternative to carrying out the project as proposed; or
        - There is no reasonable economic use that can be pursued if the regulation is strictly applied; or
        - The benefit to the public interest exceeds the impacts to the critical area; and
    - Appropriate mitigation as required in *TMC* 13.11 is provided.

7. TMC 13.11.240. B. Reasonable use. A Reasonable Use exists when the standards of the chapter deny al reasonable economic use of the property. To demonstrate Reasonable Use, the applicant must demonstrate the following:

   1. There is no reasonable economic use or value with less impact on the wetland or stream or FWHCA;

   2.There are no feasible on-site alternatives to the proposed activity or use (e.g. reduction in density or use intensity, scope or size, change in timing, phasing or implementation, layout revision or other site planning considerations) that would allow reasonable economic use with less adverse impact;

   3.The proposed activity or use will be mitigated to the maximum practical extent and result in minimum feasible alteration or impairment of functional characteristics of the site, including contours, vegetation, fish and wildlife habitat, groundwater, surface water and hydrological conditions;

   4.The proposed activity or use complies with all local, state, and federal laws and will not jeopardize the continued existence of endangered, threatened, sensitive or priority habitat or species; and

   5. The inability to derive reasonable economic use is not the result of any action, such as but not limited to, in segregating or dividing the property in a way that makes the property unable to be developed after the effective date of the ordinance codified in this chapter.

   The applicant argued that "permanent direct effects to wetlands and wetland buffers were minimized during design, but complete avoidance was not possible due to constraints associated with safety and design guidelines. The impacted wetlands are located directly adjacent to the existing highway facility (I-5) and in some cases in the WSDOT right of way. Expansion of the roadway can only occur in this location and it is not economically feasible to move the highway. To minimize impacts, project designers superimposed maps of delineated wetlands over their designs and made site-specific adjustments to design which resulted in a reduction of wetland impacts. Wetland impacts will be mitigated for at the Clear Creek-Riverside Mitigation site.

8. In addition, the applicant must demonstrate that the correct wetland delineation methodology and wetland rating have resulted in the appropriate wetland category determination according to TMC Section 13.11.310 Wetland classification and Section 13.11.320 Wetland buffer. The applicant must also demonstrate that the proposed project is consistent with TMC 13.11.340 Wetland standards.

9. *TMC* 13.11.280 authorizes the Director to condition the approval of a Wetland Development permit when such conditions are deemed necessary to mitigate adverse impacts and carry out the provisions of *TMC* Chapter 13.11.

Conclusions:

10. Any conclusion of law hereinafter stated which may be deemed a finding of fact herein is hereby adopted as such.
11. The proposed project is consistent with the goals and policies of the Environmental Elements of the City's *Comprehensive Plan* and the implementing regulations. See Exhibits "A", "G", "L", Findings 1-4, 10-14, 17-18.
12. The Wetland Development Permit meets the requirements of TMC 13.11.310, Wetland Classification and TMC 13.11.320, Wetland Buffers. See Exhibits "A", "B", "C", "F", "G", Findings 20-21, 26-27.

13. The project will comply with mitigation requirements. Mitigation includes in-kind and off-site replacement wetland functions at the Clear Creek - Riverside mitigation site. The Clear Creek – Riverside mitigation site was previously constructed during an earlier permit for construction of the new stormwater outfall in to the Puyallup River (WET2010-40000143246). The applicant has demonstrated that the proposed mitigation meets the standards for development in or adjacent to wetlands as prescribed in *TMC* 13.11.270 and *TMC* 13.11. 340 and there will be no net loss of wetland functions as required by *TMC* 13.11.270 and 13.11.340. See Attachments "A"-"C", Exhibits "A"-"I", "L"; Findings 5-8, 22-27.
14. Provided the project is conditioned appropriately, the Director concludes that the applicant meets the requirements of the Reasonable Use Legal Test set forth in *TMC* 13.11.240.B and complies with applicable development standards found in *TMC* 13.11.250. See Attachments "A"-"C", Exhibits "A" - "I", "L"; Findings 5-8, 20-27.

DECISION

Based upon the above findings and conclusions, the requested Wetland Development Permit Modification is **Approved**, subject to the following conditions:

Conditions:

1. The applicant must record Notice on Title per *TMC* Section 13.11.200 for the mitigation site located in Pierce County. A copy of the Notice on Title shall be provided to the City of Tacoma.

2. The applicant shall conduct mitigation in accordance with the *Tacoma/Pierce County HOV Program, Clear Creek-Riverside Site, Wetland and River Mitigation Report,* prepared by Washington State Department of Transportation, January 29, 2010, and the supplemental documents or revisions provided in the application as described in the *Tacoma/Pierce County HOV Program, I-5: M Street to Portland Avenue-HOV, Wetland Mitigation Plan, July 2013.* This includes the restoration of trees within M1 following the WSDOT right of way fence relocation.

3. The applicant shall provide vegetation maintenance and monitoring of the entire mitigation area for a period of 10 years and provide remaining annual monitoring reports and required review fees to the City of Tacoma for the formal quantitative/qualitative monitoring years including Year 1, 3, 5, 7, and 10 as described within the approved Mitigation Plan. The applicant shall provide copies of any remaining informal qualitative assessments in Years 2, 4, 6, 8 and 9 to the City of Tacoma for any monitoring that they conduct on the years that are not included in the formal monitoring year. The applicant shall include all as-built and planting information for the entire site as part of the annual monitoring reports.

4. The applicant shall provide vegetation maintenance and monitoring at the M1 wetland area restoration site for a minimum of 5 years following planting and as described in the approved *Tacoma/Pierce County HOV Program, I-5: M Street to Portland Avenue-HOV, Wetland Mitigation Plan, July 2013.*

5. The applicant must continue to comply with all requirements of the *TMC* in perpetuity for the off-site mitigation site. In the event that the mitigation fails to comply with TMC 13.11, the applicant must notify the City of Tacoma and seek replacement mitigation immediately and comply with all applicable permitting.

6. The completed mitigation site may be used for future impacts along the I-5 HOV corridor as follows and as complies with the *TMC* 13.11 at the time of permitting;

"WSDOT proposes that any wetland mitigation value established at the clear Creek Riverside mitigation site that exceeds the mitigation needs of the proposed project be considered as advance mitigation and be applied to future impacts to wetlands and buffers from WSDOT roadway improvement projects anticipated in the Puyallup River basin (WRIA 10), such as the Tacoma/Pierce County HOV Program, the SR 167 Extension Project and the SR167 Corridor Project."

Advisory Notes:

The below notes are meant to provide additional information to the applicant relative to the specific development proposal. These notes are not conditions of the permit nor do they constitute a complete review of the project:

1. The decision set forth herein is based upon representations made and information submitted, including development plans and proposals, submitted to the Director. Any substantial change(s) or deviation(s) in such development plans, proposals, or conditions of approval imposed shall be subject to the approval of the Director, and may require additional permitting, public notification and comment.
2. The authorization(s) granted herein is/are subject to all applicable federal, state and local laws, regulations, and ordinances. Compliance with such laws, regulations, and ordinances are conditions precedent to the approvals granted and are continuing requirements of such approvals. By accepting this/these approvals, the applicant represents that the development and activity allowed will comply with such laws, regulations and ordinances. If, during the term of the approvals granted, the developments and activities permitted do not comply with such laws, regulations or ordinances, the applicant agrees to promptly bring such developments or activities into compliance.
3. The Wetland Development Permit shall become void after a period of five (5) years has expired from the date of this decision or appeal decision, in the event no substantial construction has taken place in accordance with plans for which the Wetland Development Permit was authorized.

ORDERED this 9th day of September, 2013.

Peter Huffman
Director, Planning and Development
Services Department

FULL DECISION TRANSMITTED this 9th day of September, 2013 by first class mail to:

Penney Kelley, Department of Ecology, P.O. Box 47600, Olympia, WA 98503-7600
Alex Calendar, Department of Ecology, P.O. Box 47775, Olympia, WA 98504-7775
Darci Brandvold, Pierce County Assessor-Treasurer, 2401 South 35th Street, Room 142, Tacoma, WA 98409
Scott Hansen, Puget Creek Restoration Society, 702 Broadway, Suite 101, Tacoma, WA 98402

Transmitted by inter-office mail to:
Merita Trohimovich, City of Tacoma, Science and Engineering Division
Brad Harp, Tacoma-Pierce County Health Department
Dan Sully, City of Tacoma, Planning and Development Services
Jesse Angel, Tacoma Water
Joshua Diekman, Public Works Engineering
Karla Kluge, City of Tacoma, Planning and Development Services

SUMMARY OF DECISION TRANSMITTED this ninth day of September, 2013 by first class and interoffice mail to:

All property owners within 400 feet of the subject property as indicated by the records of the Pierce County Assessor/Treasurer (available in the Planning and Development Services Department file.)

The Tahoma Audubon Society, 2917 Morrison Road West, University Place, WA 98466-4619

South Tacoma Neighborhood Council, Chairperson

South End Neighborhood Council, Chairperson

East Side Neighborhood Council, Chairperson

New Tacoma Neighborhood Council, Chairperson

Neighborhood Planning Team Members: Brian Boudet, Ian Munce, and Carol Wolfe

NOTE: This Wetland Development Permit expires after five (5) years if substantial construction has not taken place in accordance with the plans for which the Wetland Development Permit was authorized.

NOTE: Pursuant to RCW 36.70B.130, you are hereby notified that affected property owner(s) receiving this notice of decision may request a change in valuation for property tax purposes consistent with Pierce County's procedure for administrative appeal. To request a change in value for property tax purposes you must file with the Pierce County Board of Equalization on or before July 1st of the assessment year or within 30 days of the date of notice of value from the Assessor-Treasurer's Office. To contact the board, you may call 253-798-7415 or by e-mail at www.co.pierce.wa.us/boe.

APPEAL PROCEDURES

RECONSIDERATION:
Any person having standing under the ordinance governing this application and feeling that the decision of the Director is based on errors of procedure or fact may make a written request for review by the Director within fourteen (14) days of the issuance of the written order. This request shall set forth the alleged errors, and the Director may, after further review, take such further actions as deemed proper, and may render a revised decision. A request for RECONSIDERATION of the Director's decision in this matter must be filed in writing with the Planning and Development Services, Room 345, Third Floor, Tacoma Municipal Building, 747 Market Street, Tacoma, WA 98402, on or before September 23, 2013.

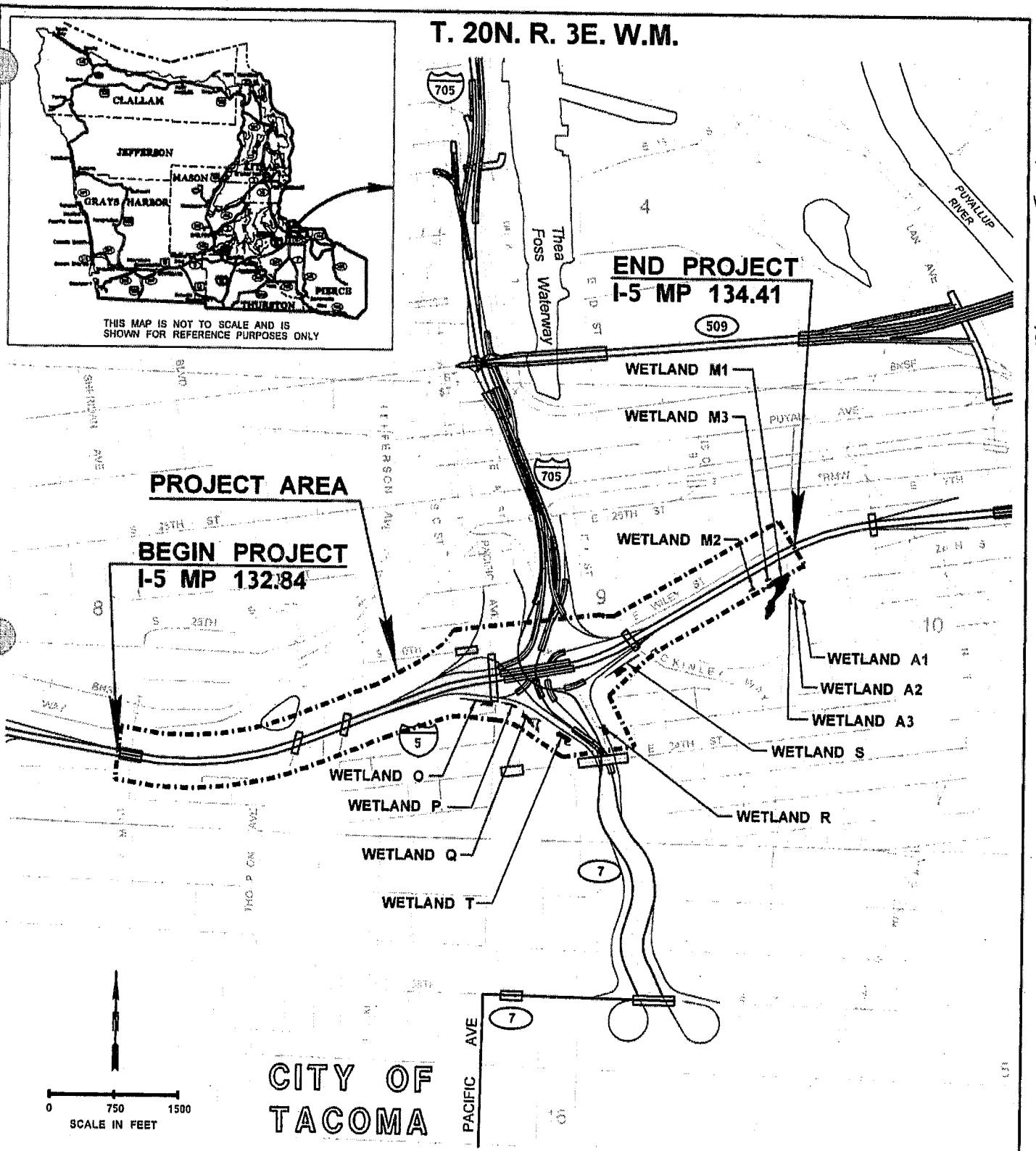
APPEAL TO HEARINGS EXAMINER:
The applicant, property owner, or owners of property entitled to receive a copy of the decision of the Director shall have the right, within fourteen (14) days of the issuance of this decision, or within seven (7) days of the date of issuance of the Director's decision on a reconsideration, to appeal the decision to the Hearing Examiner.

An appeal to the Hearing Examiner is initiated by filing a Notice of Appeal accompanied by the required filing fee. Filing of the appeal shall not be complete until both the Notice of Appeal and required filing fee have been received. The Notice of Appeal must be in writing and shall contain the following:

(1) A brief statement showing how the appellant is aggrieved or adversely affected.
(2) A statement of the grounds for the appeal, explaining why the appellant believes the administrative decision is wrong.
(3) The requested relief, such as reversal or modification of the decision.
(4) The signature, mailing address and telephone number of the appellant and any representative of the appellant.

An APPEAL of the Director's decision in this matter must be filed with the Hearing Examiner's Office, Seventh Floor, Tacoma Municipal Building, on or before September 23, 2013, together with a fee of **$311.30** THE FEE SHALL BE REFUNDED TO THE APPELLANT SHOULD APPELLANT PREVAIL. (Pursuant to Section 2.09.020 of the *Tacoma Municipal Code*, fees for appeals shall be waived for qualifying senior citizens and persons who are permanently handicapped who are eligible for tax exemption because of financial status).

APPENDIX FF



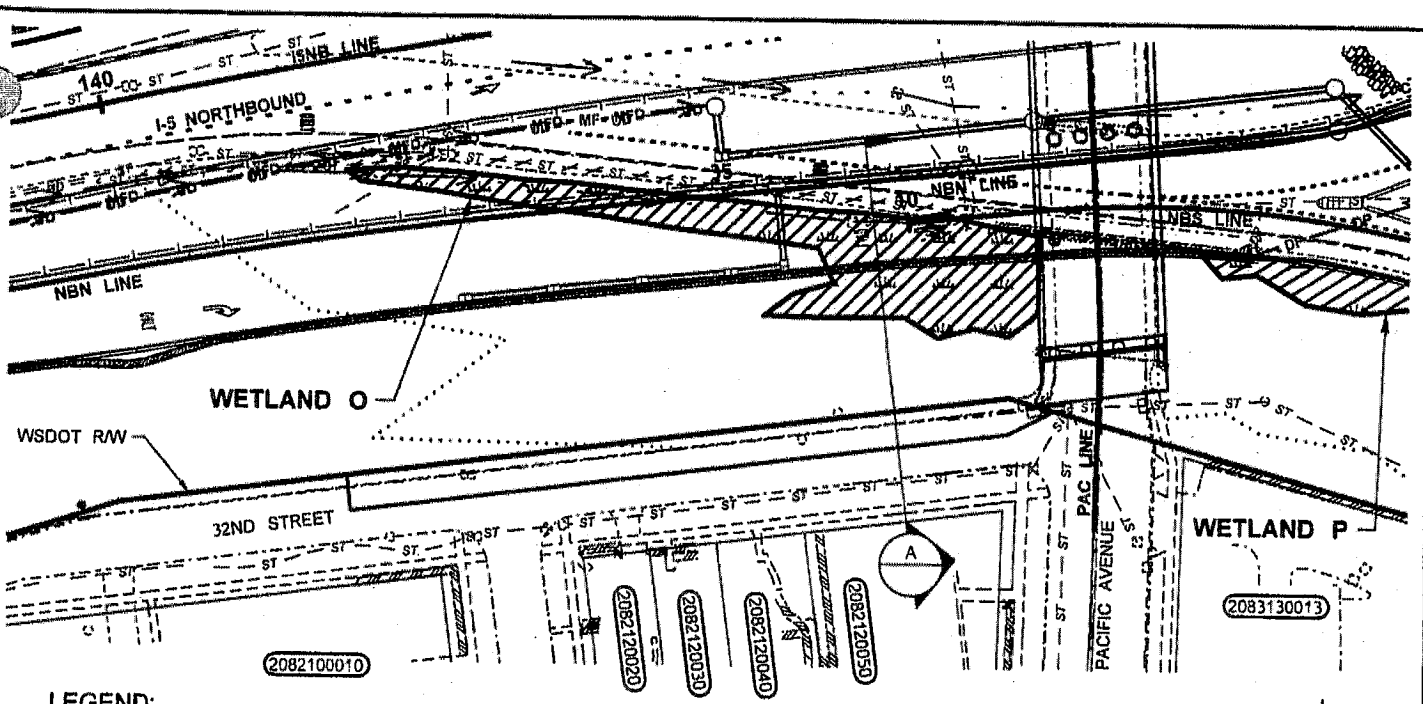
ATTACHMENT A

PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE:	
PROPOSED: I-5 M STREET TO PORTLAND AVENUE – HOV	APPLICANT: WSDOT	
CATION: PIERCE COUNTY, WA – TACOMA, WA	COUNTY: PIERCE	
TUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:	
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A	
LAT: 47°14'06" LONG: -122°28'29"		
	DATE: FEBRUARY 2013	SHEET: 1 OF: 10

Washington State Department of Transportation

PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_01.dgn
6/26/2013
8:30:53 AM

APPENDIX FF

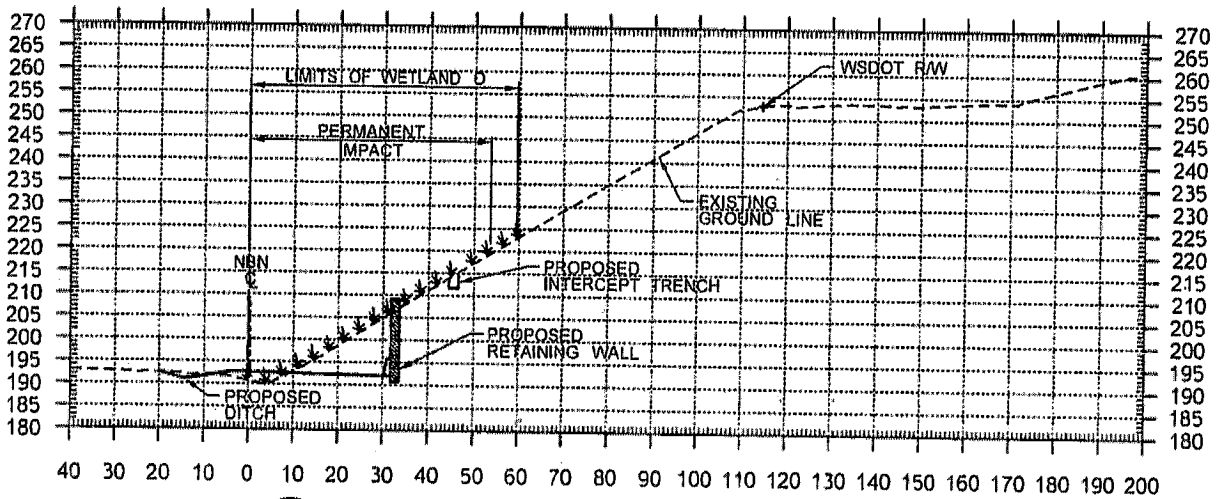


ATTACHMENT B-1

LEGEND:

- EXISTING NON-JURISDICTIONAL DITCH
- EXISTING JURISDICTIONAL DITCH
- EXISTING DRAIN PIPE
- EXISTING STORM SEWER LINE
- EXISTING CATCH BASIN
- EXISTING GRATE INLET
- EXISTING MANHOLE
- EXISTING EDGE OF ROADWAY
- EXISTING RETAINING WALL
- TAX PARCEL NUMBER
- PROPOSED EDGE OF ROADWAY
- CUT — PROPOSED EXCAVATION / CUT LIMITS
- FILL — PROPOSED FILL LIMITS
- CG — CG — PROPOSED CLEARING & GRUBBING LIMITS
- WSDOT RIGHT OF WAY LIMITS
- PROPOSED RETAINING WALL
- WETLAND
- PERMANENT WETLAND IMPACT
- TEMPORARY WETLAND IMPACT
- PERMANENT BUFFER IMPACT
- TEMPORARY BUFFER IMPACT
- LONG TERM TEMPORARY WETLAND IMPACT
- WETLAND BUFFER

0 50 100
SCALE IN FEET



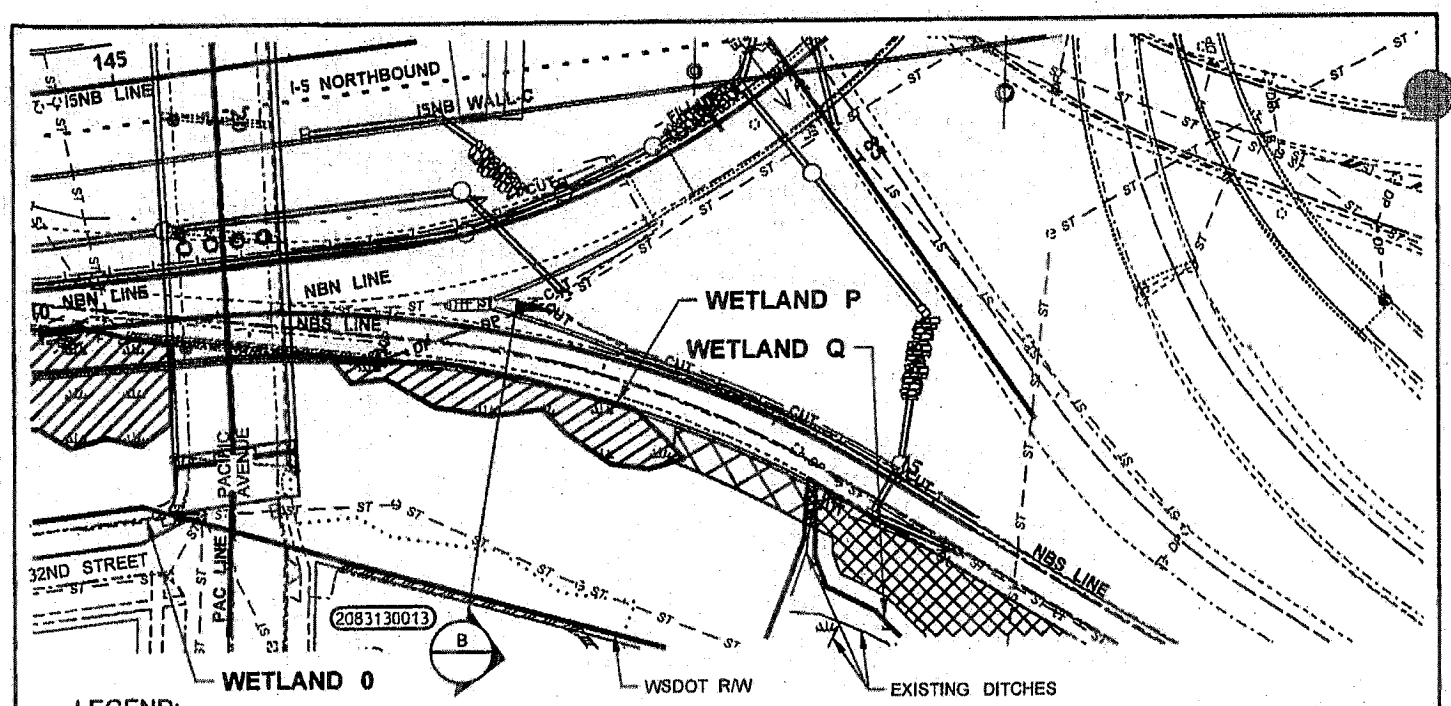
A - SECTION - WETLAND O (NBN LINE STA. 35+80)

PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE:
PROPOSED: I-5 M STREET TO PORTLAND AVENUE - HOV	APPLICANT: WSDOT
LOCATION: PIERCE COUNTY, WA - TACOMA, WA	COUNTY: PIERCE
DATUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A
LAT: 47°14'06" LONG: -122°28'29"	
	DATE: FEBRUARY 2013

Washington State Department of Transportation

SHEET: 3 OF: 10

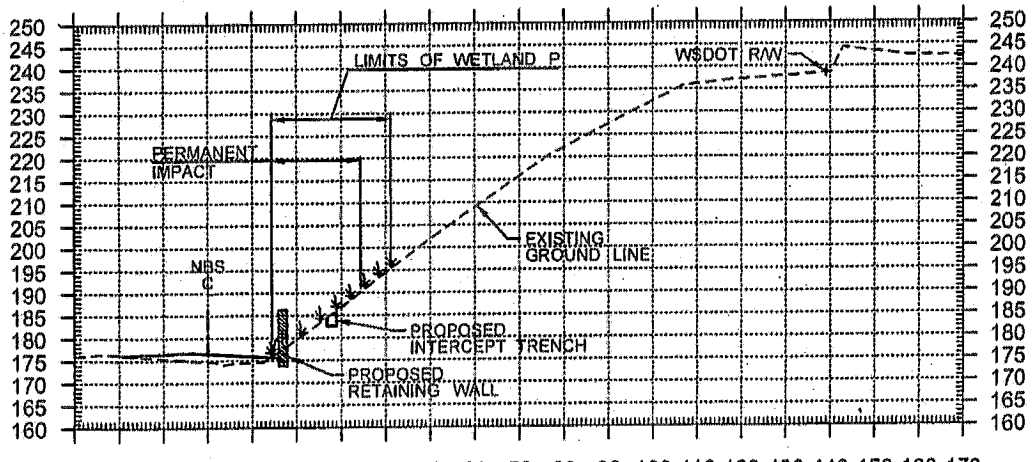
PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_03.dgn
6/26/2013
2:52:57 PM



LEGEND:

- EXISTING NON-JURISDICTIONAL DITCH
- EXISTING JURISDICTIONAL DITCH
- EXISTING DRAIN PIPE
- EXISTING STORM SEWER LINE
- EXISTING CATCH BASIN
- EXISTING GRATE INLET
- EXISTING MANHOLE
- EXISTING EDGE OF ROADWAY
- EXISTING RETAINING WALL
- TAX PARCEL NUMBER
- PROPOSED EDGE OF ROADWAY
- PROPOSED EXCAVATION / CUT LIMITS
- PROPOSED FILL LIMITS
- PROPOSED CLEARING & GRUBBING LIMITS
- WSDOT RIGHT OF WAY LIMITS
- PROPOSED RETAINING WALL
- WETLAND
- PERMANENT WETLAND IMPACT
- TEMPORARY WETLAND IMPACT
- PERMANENT BUFFER IMPACT
- TEMPORARY BUFFER IMPACT
- LONG TERM TEMPORARY WETLAND IMPACT
- WETLAND BUFFER

0 50 10
SCALE IN FEET



B SECTION - WETLAND P (NBS LINE STA. 12+40)

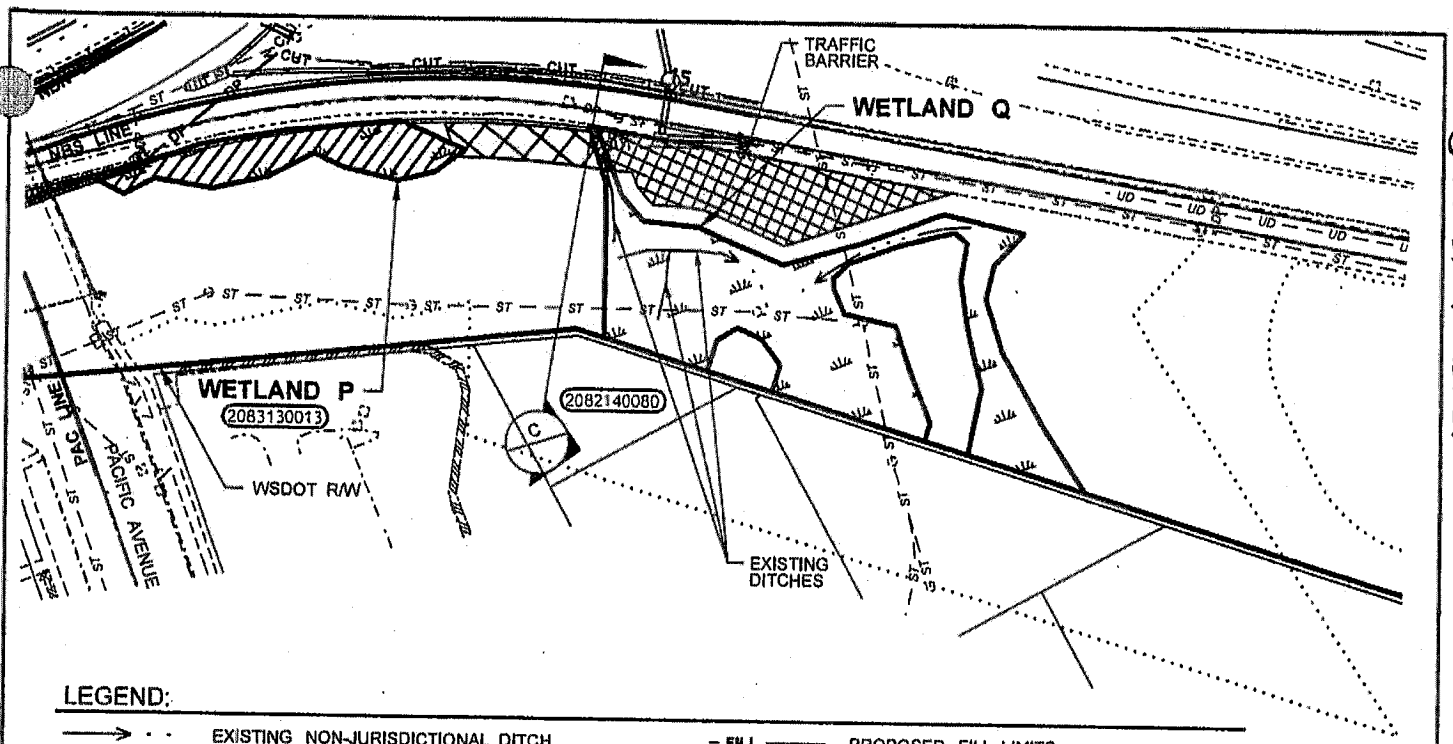
PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE:
PROPOSED: I-5 M STREET TO PORTLAND AVENUE - HOV	APPLICANT: WSDOT
LOCATION: PIERCE COUNTY, WA - TACOMA, WA	COUNTY: PIERCE
DATUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A
LAT: 47°14'06" LONG: -122°28'29"	
	DATE: FEBRUARY 2013

Washington State Department of Transportation

SHEET: 4 OF: 10

PW:_XL3497\Wetlands Mitigation\JARPA\3349_8H_8N_JARPA_04.dgn
6/26/2013
11:54:35 AM

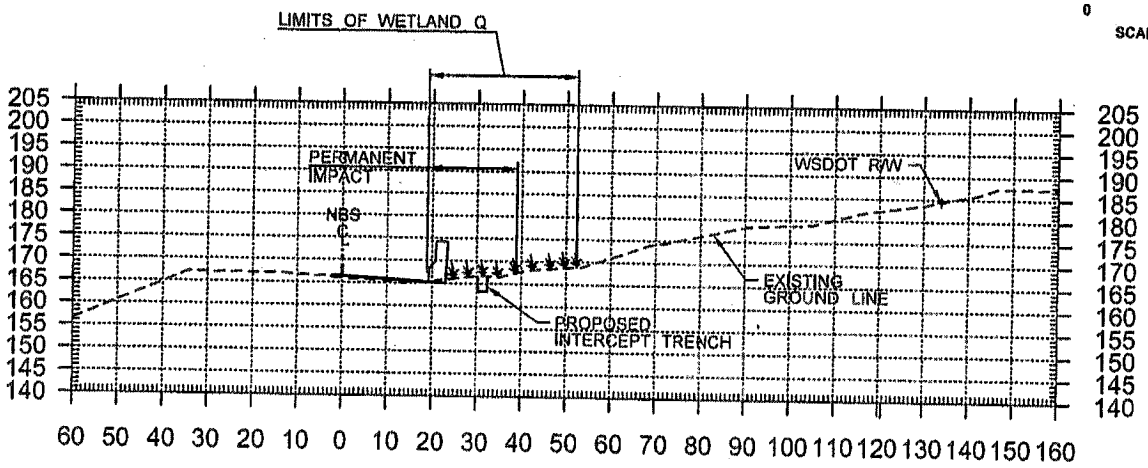
ATTACHMENT B.3



LEGEND:

- EXISTING NON-JURISDICTIONAL DITCH
- EXISTING JURISDICTIONAL DITCH
- EXISTING DRAIN PIPE
- EXISTING STORM SEWER LINE
- EXISTING CATCH BASIN
- EXISTING GRATE INLET
- EXISTING MANHOLE
- EXISTING EDGE OF ROADWAY
- EXISTING RETAINING WALL
- TAX PARCEL NUMBER
- PROPOSED EDGE OF ROADWAY
- PROPOSED EXCAVATION / CUT LIMITS
- PROPOSED FILL LIMITS
- PROPOSED CLEARING & GRUBBING LIMITS
- WSDOT RIGHT OF WAY LIMITS
- PROPOSED RETAINING WALL
- WETLAND
- PERMANENT WETLAND IMPACT
- TEMPORARY WETLAND IMPACT
- PERMANENT BUFFER IMPACT
- TEMPORARY BUFFER IMPACT
- LONG TERM TEMPORARY WETLAND IMPACT
- WETLAND BUFFER

0 50 100
SCALE IN FEET



C SECTION - WETLAND Q (NBS LINE STA. 14+40.73)

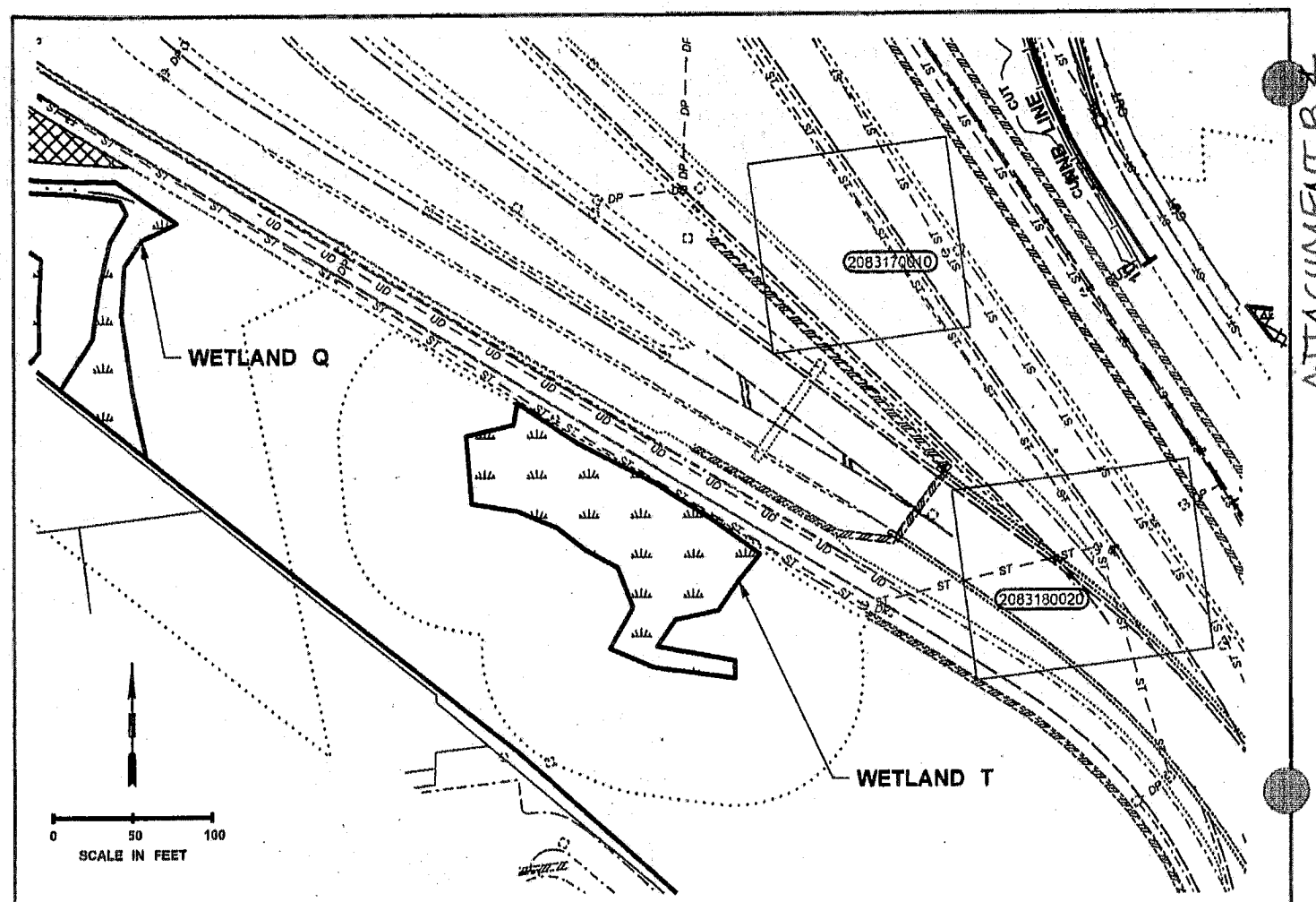
PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE:
PROPOSED: I-5 M STREET TO PORTLAND AVENUE - HOV	APPLICANT: WSDOT
LOCATION: PIERCE COUNTY, WA – TACOMA, WA	COUNTY: PIERCE
DATUM: HORZONTAL: NAD83, VERTICAL: NAVD88	NEAR:
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A
LAT: 47° 14'06" LONG: -122° 28'29"	
	DATE: FEBRUARY 2013

Washington State Department of Transportation

SHEET: 5 OF: 10

PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_05.dgn
6/26/2013
11:52:33 AM

ATTACHMENT B.4



LEGEND:

- EXISTING NON-JURISDICTIONAL DITCH
- EXISTING JURISDICTIONAL DITCH
- EXISTING DRAIN PIPE
- EXISTING STORM SEWER LINE
- EXISTING CATCH BASIN
- EXISTING GRATE INLET
- EXISTING MANHOLE
- EXISTING EDGE OF ROADWAY
- EXISTING RETAINING WALL
- TAX PARCEL NUMBER
- PROPOSED EDGE OF ROADWAY
- CUT — PROPOSED EXCAVATION / CUT LIMITS
- FILL — PROPOSED FILL LIMITS
- CG — CG — PROPOSED CLEARING & GRUBBING LIMITS
- WSDOT RIGHT OF WAY LIMITS
- PROPOSED RETAINING WALL
- WETLAND
- PERMANENT WETLAND IMPACT
- TEMPORARY WETLAND IMPACT
- PERMANENT BUFFER IMPACT
- TEMPORARY BUFFER IMPACT
- LONG TERM TEMPORARY WETLAND IMPACT
- WETLAND BUFFER

WETLAND T

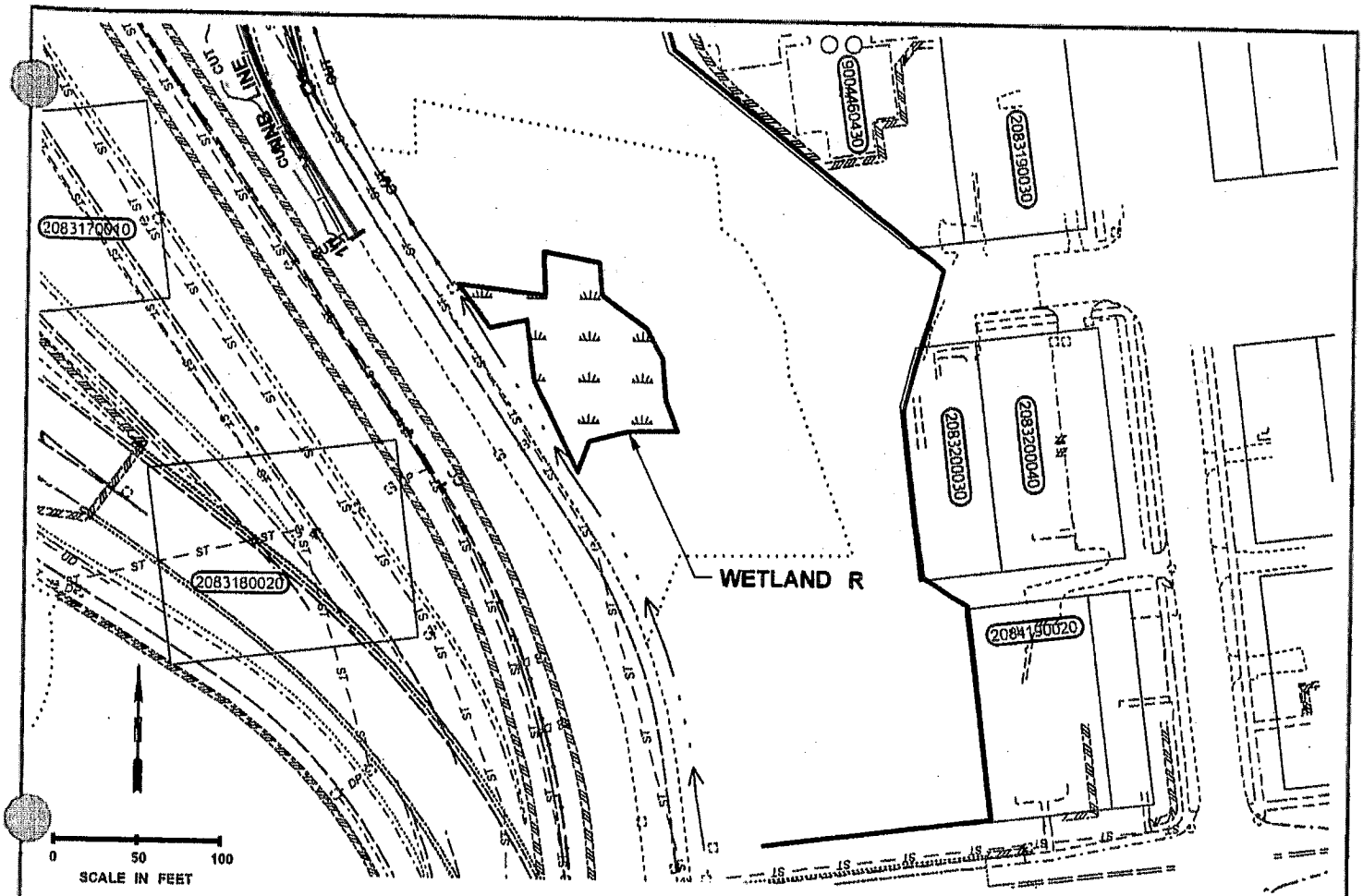
PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE:
PROPOSED: I-5 M STREET TO PORTLAND AVENUE - HOV	APPLICANT: WSDOT
LOCATION: PIERCE COUNTY, WA - TACOMA, WA	COUNTY: PIERCE
DATUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A
LAT: 47 14'06" LONG: -122 28'29"	
	DATE: FEBRUARY 2013

Washington State Department of Transportation

SHEET: 6 OF: 10

PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_06.dgn
6/26/2013
8:32:57 AM

ATTACHMENT B.5



LEGEND:

- EXISTING NON-JURISDICTIONAL DITCH
- EXISTING JURISDICTIONAL DITCH
- EXISTING DRAIN PIPE
- EXISTING STORM SEWER LINE
- EXISTING CATCH BASIN
- EXISTING GRATE INLET
- EXISTING MANHOLE
- EXISTING EDGE OF ROADWAY
- EXISTING RETAINING WALL
- TAX PARCEL NUMBER
- PROPOSED EDGE OF ROADWAY
- CUT — PROPOSED EXCAVATION / CUT LIMITS
- FILL — PROPOSED FILL LIMITS
- CG — CG — PROPOSED CLEARING & GRUBBING LIMITS
- WSDOT RIGHT OF WAY LIMITS
- PROPOSED RETAINING WALL
- WETLAND
- PERMANENT WETLAND IMPACT
- TEMPORARY WETLAND IMPACT
- PERMANENT BUFFER IMPACT
- TEMPORARY BUFFER IMPACT
- LONG TERM TEMPORARY WETLAND IMPACT
- WETLAND BUFFER

WETLAND R

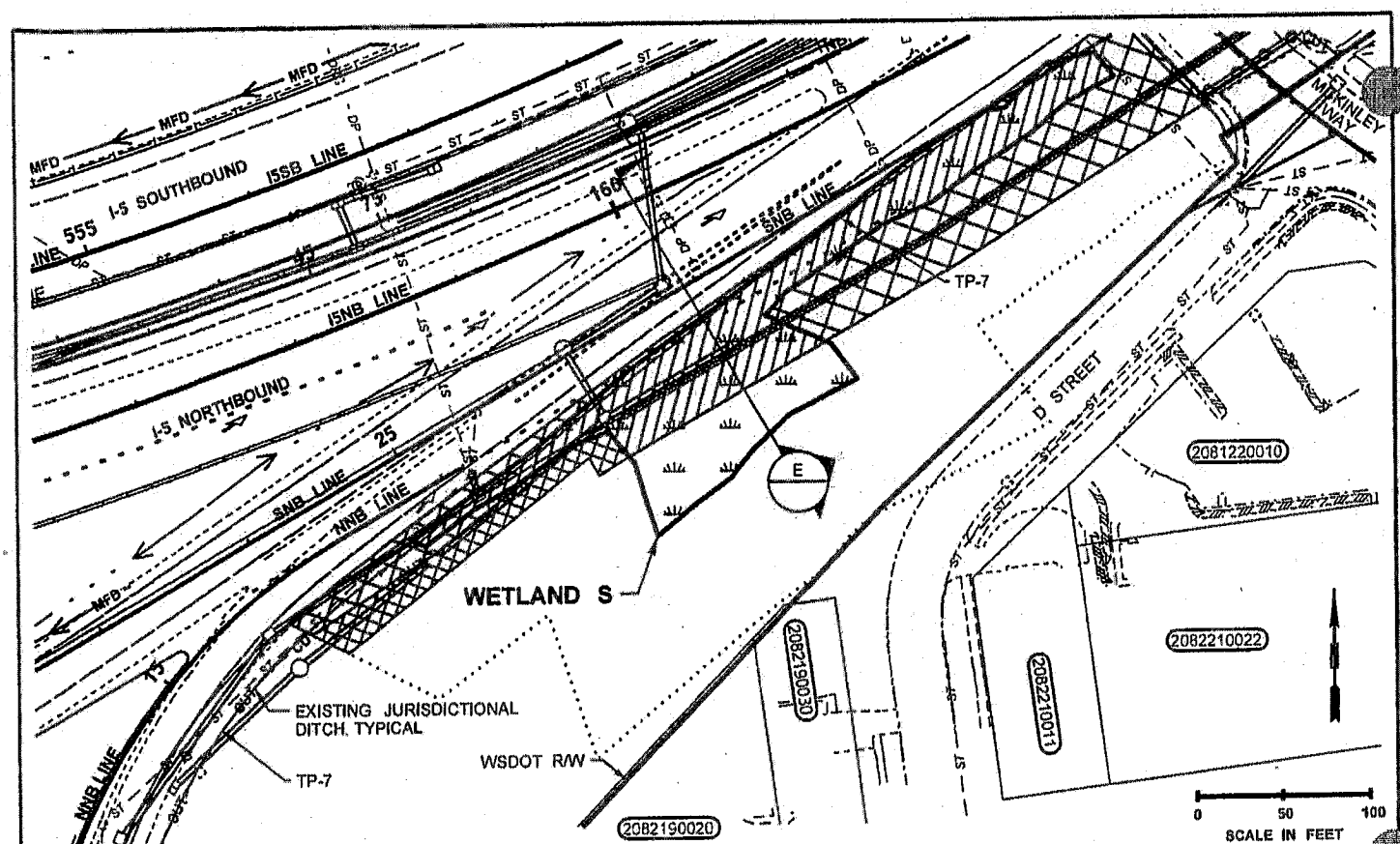
PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE:
PROPOSED: I-5 M STREET TO PORTLAND AVENUE - HOV	APPLICANT: WSDOT
CATION: PIERCE COUNTY, WA - TACOMA, WA	COUNTY: PIERCE
UM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A
LAT: 47 14'06" LONG: -122 28'29"	
	DATE: FEBRUARY 2013

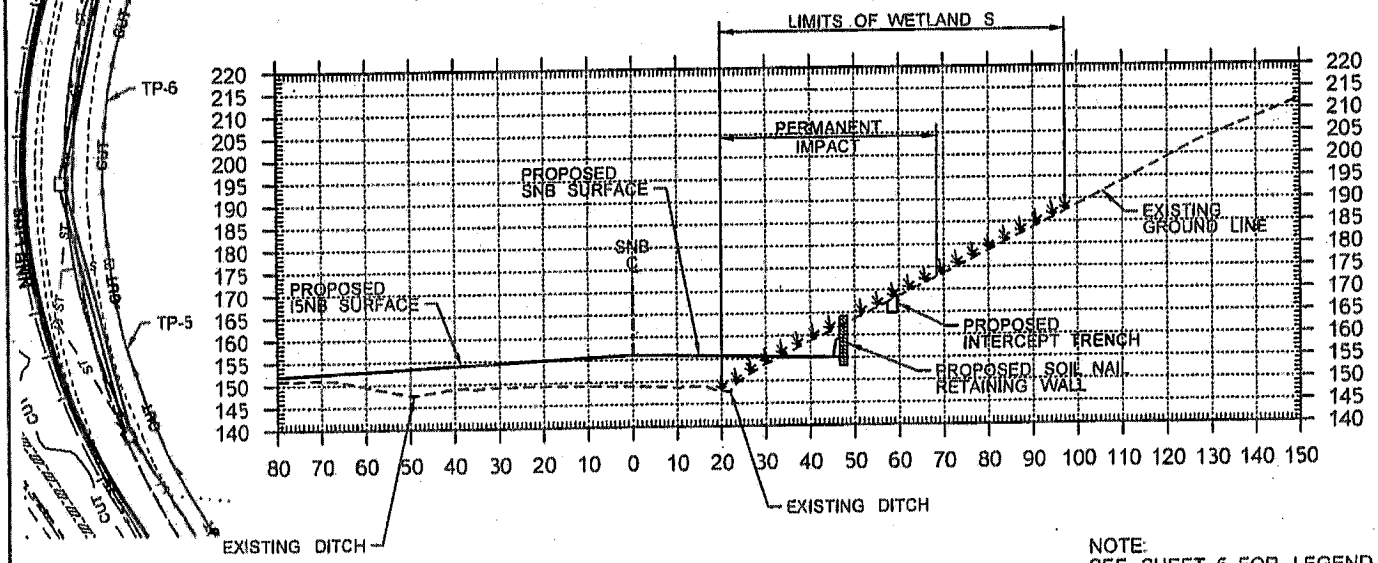
Washington State Department of Transportation

SHEET: 7 OF: 10

PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_07.dgn
6/26/2013
8:33:55 AM

ATTACHMENT B.9





NOTE:
SEE SHEET 6 FOR LEGEND

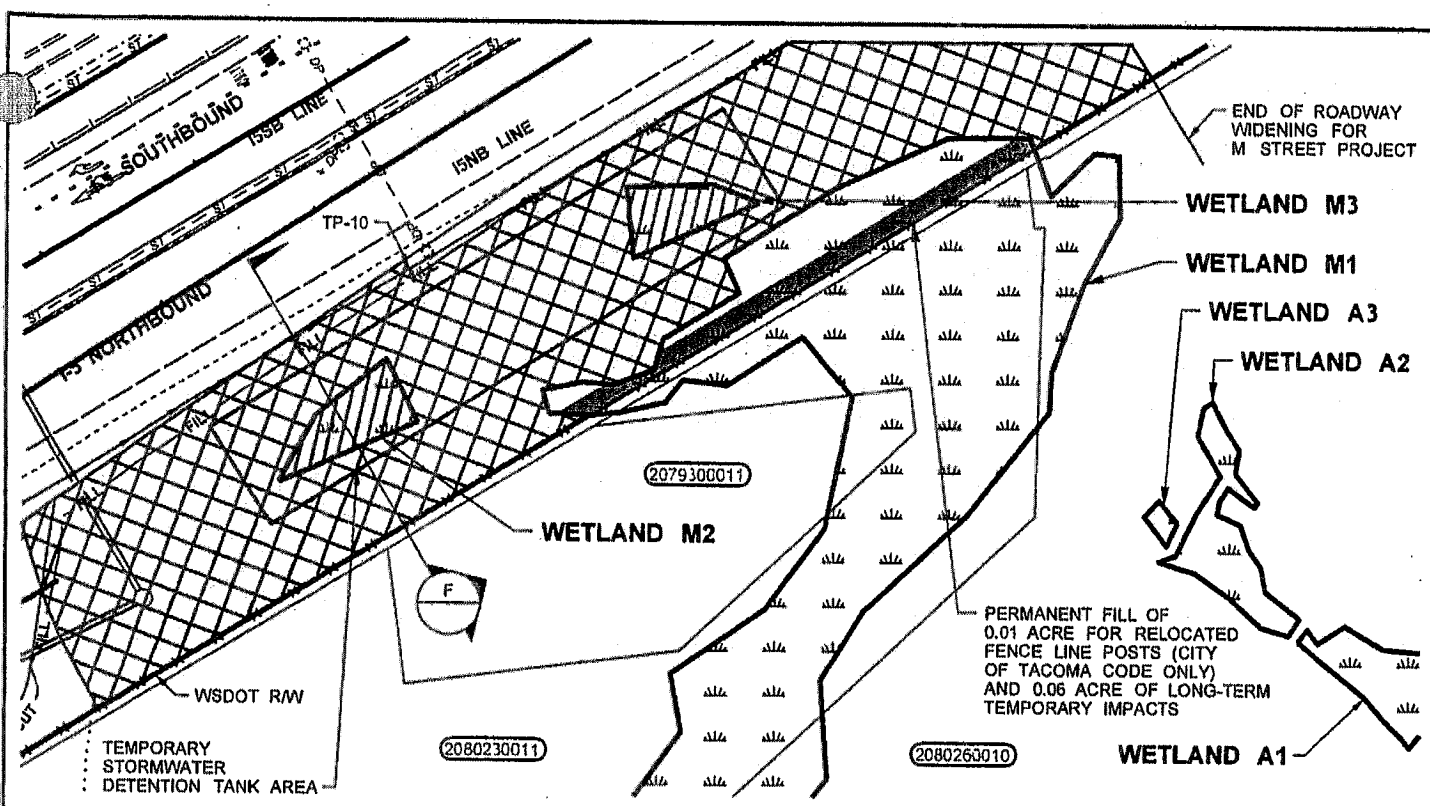
E SECTION - WETLAND S (SNB LINE STA. 27+00)

PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE:
PROPOSED: I-5 M STREET TO PORTLAND AVENUE - HOV	APPLICANT: WSDOT
LOCATION: PIERCE COUNTY, WA - TACOMA, WA	COUNTY: PIERCE
DATUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A
LAT: 47°14'06" LONG: -122°28'29"	DATE: FEBRUARY 2013

Washington State Department of Transportation

SHEET: 8 OF: 10

PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_08.dgn
7/2/2013
9:09:25 AM

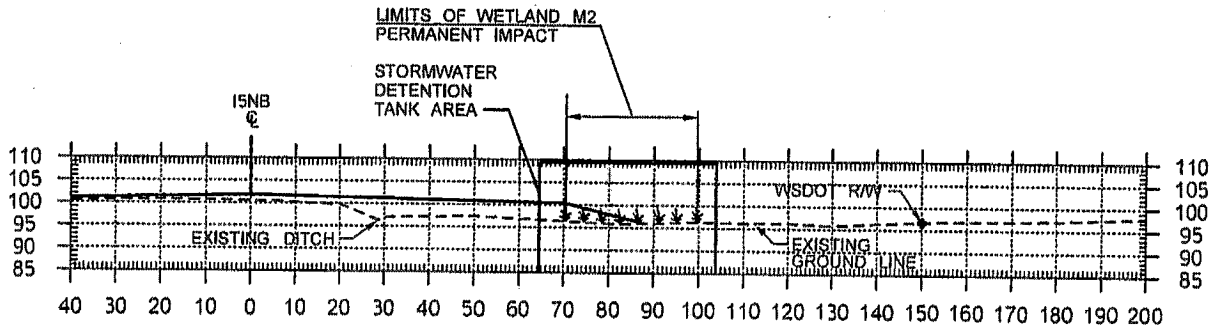


ATTACHMENT B-7

LEGEND:

- EXISTING NON-JURISDICTIONAL DITCH
- EXISTING JURISDICTIONAL DITCH
- EXISTING DRAIN PIPE
- EXISTING STORM SEWER LINE
- EXISTING CATCH BASIN
- EXISTING GRATE INLET
- EXISTING MANHOLE
- EXISTING EDGE OF ROADWAY
- EXISTING RETAINING WALL
- TAX PARCEL NUMBER
- PROPOSED EDGE OF ROADWAY
- CUT — PROPOSED EXCAVATION / CUT LIMITS
- FILL — PROPOSED FILL LIMITS
- CG — CG — PROPOSED CLEARING & GRUBBING LIMITS
- WSDOT RIGHT OF WAY LIMITS
- PROPOSED RETAINING WALL
- WETLAND
- PERMANENT WETLAND IMPACT
- TEMPORARY WETLAND IMPACT
- PERMANENT BUFFER IMPACT
- TEMPORARY BUFFER IMPACT
- LONG TERM TEMPORARY WETLAND IMPACT
- WETLAND BUFFER

0 50 100
SCALE IN FEET



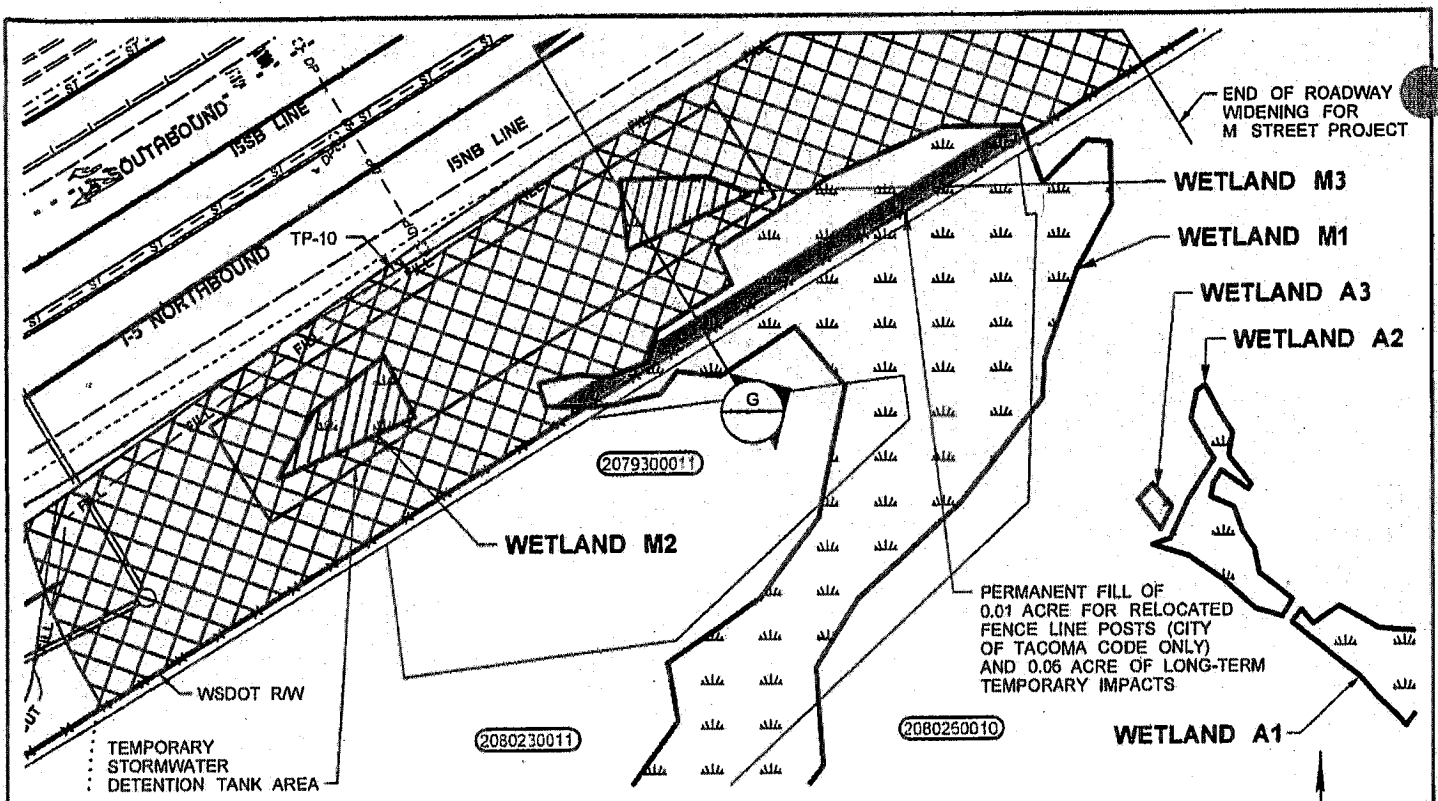
F SECTION - WETLAND M2 (I5NB LINE STA. 178+00)

PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE:
PROPOSED: I-5 M STREET TO PORTLAND AVENUE - HOV	APPLICANT: WSDOT
LOCATION: PIERCE COUNTY, WA - TACOMA, WA	COUNTY: PIERCE
DATUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A
LAT: 47°14'06" LONG: -122°28'29"	
	DATE: FEBRUARY 2013

Washington State Department of Transportation

SHEET: 9 OF: 10

PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_09.dgn
7/2/2013
9:04:34 AM

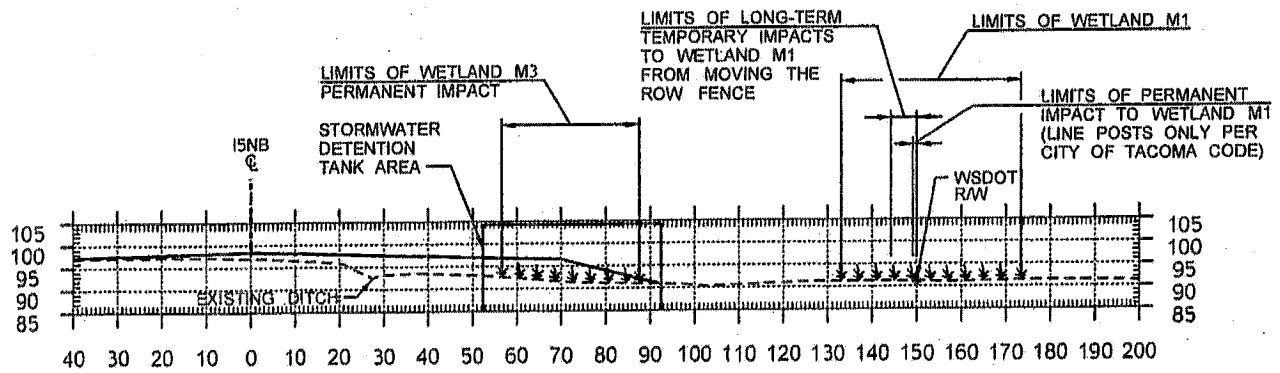


ATTACHMENT B. 28

LEGEND:

- EXISTING NON-JURISDICTIONAL DITCH
- EXISTING JURISDICTIONAL DITCH
- EXISTING DRAIN PIPE
- EXISTING STORM SEWER LINE
- EXISTING CATCH BASIN
- EXISTING GRATE INLET
- EXISTING MANHOLE
- EXISTING EDGE OF ROADWAY
- EXISTING RETAINING WALL
- TAX PARCEL NUMBER
- PROPOSED EDGE OF ROADWAY
- PROPOSED EXCAVATION / CUT LIMITS
- PROPOSED FILL LIMITS
- PROPOSED CLEARING & GRUBBING LIMITS
- WSDOT RIGHT OF WAY LIMITS
- PROPOSED RETAINING WALL
- WETLAND
- PERMANENT WETLAND IMPACT
- TEMPORARY WETLAND IMPACT
- PERMANENT BUFFER IMPACT
- TEMPORARY BUFFER IMPACT
- LONG TERM TEMPORARY WETLAND IMPACT
- WETLAND BUFFER

0 50 100
SCALE IN FEET



G SECTION - WETLANDS M1 & M3 (I5NB LINE STA. 180+00)

PURPOSE: IMPROVE TRAFFIC FLOW AND INCREASE SAFETY	REFERENCE:
PROPOSED: I-5 M STREET TO PORTLAND AVENUE - HOV	APPLICANT: WSDOT
LOCATION: PIERCE COUNTY, WA - TACOMA, WA	COUNTY: PIERCE
DATUM: HORIZONTAL: NAD83, VERTICAL: NAVD88	NEAR:
ADJACENT PROPERTY OWNERS: SEE SHEET 2	WATER BODY: N/A
LAT: 47°14'06" LONG: -122°28'29"	
	DATE: FEBRUARY 2013

Washington State Department of Transportation

SHEET: 10 OF: 10

PW:_XL3497\Wetlands Mitigation\JARPA\3349_SH_EN_JARPA_10.dgn
7/2/2013
9:02:12 AM

ATTACHMENT C.1

EXHIBIT 4-2
Mitigation Site Location WRIA 10

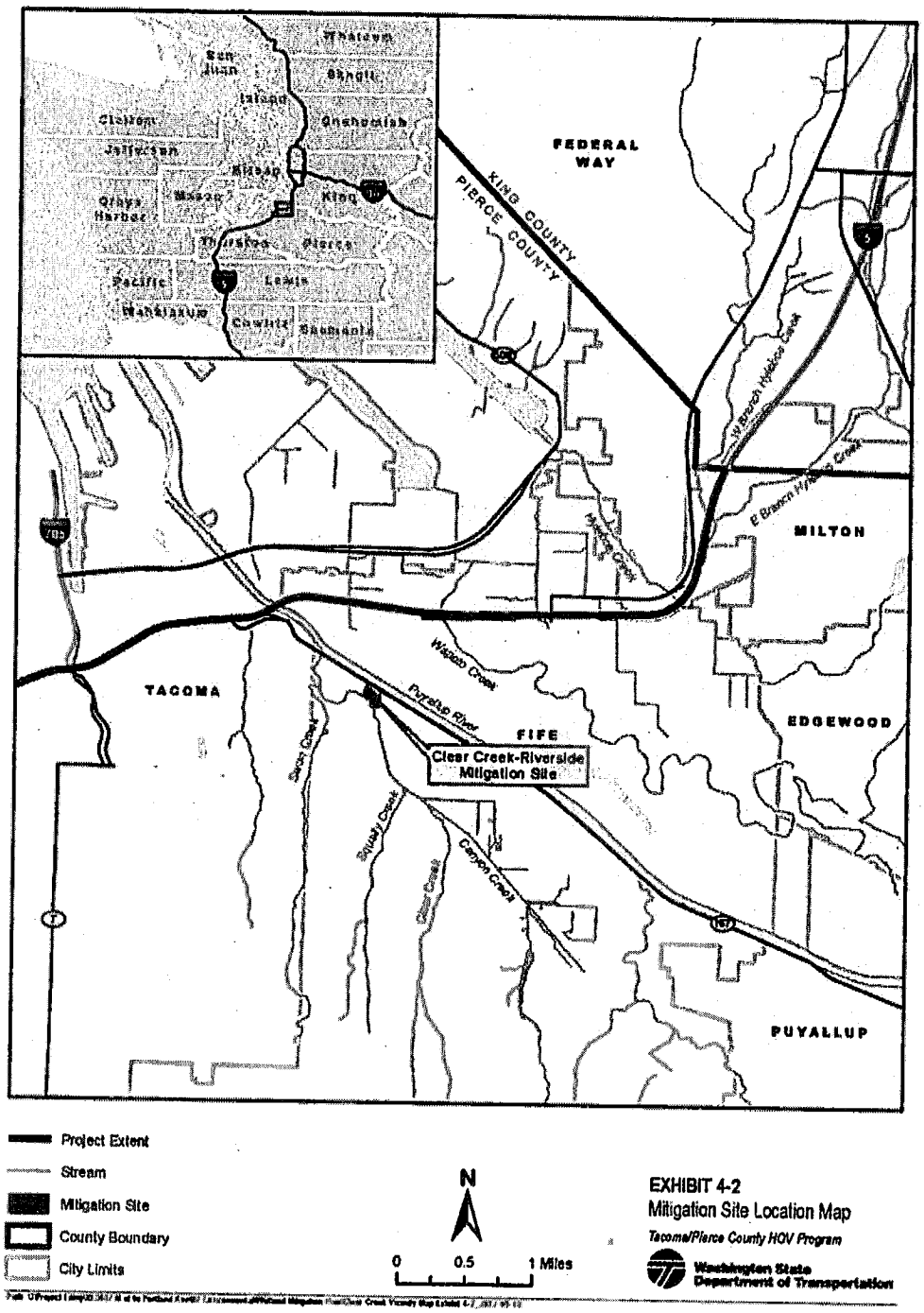


EXHIBIT 4-2
Mitigation Site Location Map
Tacoma/Pierce County HOV Program
Washington State Department of Transportation

ATTACHMENT C-2

EXHIBIT 4-3
Proposed Clear Creek-Riverside Mitigation Site Layout and HOV project debits

APPENDIX GG

City of Tacoma Stormwater Approval to Discharge Special Authorization to Discharge to Storm Drain & Sanitary Sewer

City of Tacoma
Environmental Services Department

November 25, 2013

Washington State Department of Transportation
Mr. Joe Perez, Project Engineer
724 Quince Street, Suite 206
Olympia, WA 98504-7376

Hand Delivered

Received by Date

SUBJECT: Special Approved Discharge Authorization

Dear Mr. Perez:

Please find enclosed, the Special Approved Discharge Authorization for the M Street to Portland Avenue I-5 HOV lane project. The effective date of this Authorization is November 25, 2013.

Please pay special attention to Section B of the Authorization. Additionally, the Authorization is transferable to the General Contractor once selected. Should you have any questions, please contact Paul Tollefson at (253) 255-7187 or email at ptollefs@cityoftacoma.org.

Sincerely,

Michael L. Kennedy
Assistant Division Manager
Business Operations Division

MLK: PT:cfp
Enclosure: SAD Authorization

G:\EnviroCompliance\SAD\2013 SAD's\WSDOT I5 M street to Portland Ave storm\November 252013WSDOTcoverletter.docx

SPECIAL AUTHORIZATION
TO
DISCHARGE TO THE CITY OF TACOMA'S
STORM & SANITARY SEWER SYSTEM(S)

In accordance with Tacoma Municipal Code Chapter 12.08.365 and subject to the conditions contained in Chapter 12.08 and in this Authorization, the entity specified herein is authorized to discharge to the City of Tacoma's (City) *storm and sanitary sewer systems*:

Washington State Department of Transportation (WSDOT), Carrie Berry
Name of Responsible Company, Authorized Representative, Phone No.

724 Quince Street SE, Suite 206, Olympia, WA 98504-7376
Address of Company, Street, City, State, ZIP

Joe Perez, Project Engineer, 360 709-8158
Company Contact Person, Phone number, Emergency (24 hr) Phone No.

WSDOT, 360 709-8158
Name of Property Owner, Phone number

724 Quince Street SE, Suite 206, Olympia WA 98504-7376
Address of Property Owner, Street, City, State, ZIP

Various locations within WSDOT right of way
Address of Discharge Location, Street, City

A. PURPOSE OF DISCHARGE:

The WSDOT I-5 M Street to Portland Avenue HOV lane project replaces I-5 mainline pavement and resurfaces several ramps at the I-5/I-705/SR-7 interchange. The project also demolishes and reconstructs two new bridges spanning I-5 at Pacific Avenue and McKinley Way. A new northbound bridge will be constructed over the SR-7/I-705 interchange to match the realignment of northbound I-5. The project widens I-5 for HOV lanes northbound and southbound between M street and Portland Avenue. Portions of the on and off ramps at the I-5/I-705/SR-7 interchange will be reconstructed and several retaining walls will be added. In addition, several stormwater facilities will be constructed. This Authorization will cover discharges from construction related activities to the City of Tacoma's (City or Tacoma) municipal storm and sanitary systems for the duration of the project, which is expected to begin in early 2014 with an end date of December 2017.

B. DISCHARGE CONDITIONS:

1. Flow Limitations and Monitoring Requirements:

The authorized dishcarger must monitor for unusual color, odor or sheen during all discharge operations. If any abnormalities are observed discharging must be immediately discontinued and the City notified at (253) 591-5588. Additionally, discharging during inclement weather may result in reduced flow rates based on system capacity. The authorized dishcarger will be responsible for pump watch during any discharges outside of normal working hours. Please see the table below for discharge flow rate limitations for storm and sanitary discharge locations:

Municipal Storm Drainage System Discharge Locations:

Asset	Requested Flow Rate	Flow Rate Allowed
New location I-5/I-705/SR-7	6000 gpm	1500 gpm
6764496	2000 gpm	500 gpm
6765787	2000 gpm	500 gpm

Municipal Sanitary Sewer System Discharge Locations:

Asset	Requested Flow Rate	Flow Rate Allowed
6772030	250 gpm	250 gpm
6769293	1000 gpm	500 gpm

The authorized discharger must meter all authorized flows to the municipal systems. For storm discharges, the flow data must be recorded in gallons and for sanitary discharges the flow data must be recorded in cubic feet. All flow data must be recorded in a log book and kept onsite for inspector review. The flow data must be provided to the City on a biannual basis for billing purposes.

2. Quality Limitations and Monitoring Requirements:

At a minimum, the authorized discharger must be compliant with the NPDES General Construction Permit issued for the project to be in compliance with this Authorization. Discharging leachate water from the contaminated underground vault or groundwater from the Mckinley Park bioswale to the City's stormwater system is prohibited.

For discharges to the City's municipal sanitary sewer system, the authorized discharger is required to discharge wastewater on a "batch" basis. Discharging uncontaminated surface water into the municipal sanitary sewer system is prohibited. This Authorization covers discharges to the City's sanitary sewer system for wastewater(s) such as treated leachate, contaminated groundwater, treated boring slurry, cement related wastewater, and other construction related wastewaters as approved by the City. The table below lists the sample parameters for sanitary discharges and the limitations for each parameter. At a minimum, sampling must be conducted prior to each "batch" discharge until an alternative sampling frequency is determined by the City. All samples taken for parameters listed in Section B2 from the sample location described in Section B1, shall be collected and analyzed in accordance with 40 CFR Part 136 Guidelines Establishing Test Procedures For The Analysis Of Pollutants as amended. Results of those analyses shall be submitted to the Director within the time frame specified for required reports in Section F.

Parameters	Units	Daily Maximum
Arsenic	mg/L	0.1
BETX[1]	mg/L	10 mg/L
Chlorine, Total Residual	mg/L	2.0
Chromium, Total	mg/L	1.0
Chromium, Hexavalent[2]	mg/L	0.25
Copper	mg/L	1.0
Lead	mg/L	0.4
pH within the range of	units	5.5-11.0
Total Petroleum Hydrocarbons[3] (TPH)	mg/L	50[4]
Total Suspended Solids (TSS—Residue)	mg/L	Report
Total Toxic Organics (TTOs)[5]	mg/L	2.13
Zinc	mg/L	2.0

C. DISCHARGE LOCATION:

The authorized discharger will discharge at specific manhole locations of both municipal storm and sanitary systems within the project limits, generally, between M Street and Portland Avenue in the I-5 corridor. Alternate discharge locations must be pre-approved by the City.

D. OTHER CONDITIONS:

1. WSDOT must possess a valid NPDES Permit or equivalent authorization from the Department of Ecology and/or the Environmental Protection Agency, if applicable, and operate in compliance with that permit as determined by the issuing agency.

---

[1] Benzene, ethyl benzene, toluene, total xylenes
[2] Chromium $^{+6}$ shall be analyzed when the total chromium concentration is > 0.25 mg/L.
[3] Analyzed using EPA Method 1664A and reported as Silica Gel Treated Hexane Extractable Material (SGT-HEM).
[4] No free floating oil or visible sheen is allowed.
[5] Specific analytes are as follows: the 126 priority pollutants in 40 CFR Part 401.15, excluding asbestos and 2,3,7,8-TCDD (dioxin).

2. The City of Tacoma reserves all of the powers set forth in Chapter 12.08 TMC, as well as any other applicable powers granted by the Tacoma Municipal Code, state and/or federal law to enforce the terms of the Authorization, and to regulate the use of its municipal sewer system including, but not limited to, seeking supplemental charges under TMC 12.08.610.

3. Applicable fees and payments must be made in accordance with Tacoma Municipal Code Chapter 12.08.

4. Transfer of Special Approved Discharge Authorization:
   Coverage under this Authorization may be transferred to a new discharger if a written agreement between the current discharger and the new discharger, signed by both parties and containing a specific date for transfer of responsibility, coverage and liability is submitted to, and approved by, Environmental Services. The approved written agreement will be amended to the original Authorization.

5. Must cease discharge upon ANY of the following conditions:

   a. Violation, either suspected or detected, of any of the discharge conditions specified in B. above.

   b. When directed to by the City.

6. The authorized discharger must deliver a letter to the City at the office of Environmental Compliance Support, 326 East D Street, Tacoma, 98421-1801, (FAX (253) 502-2295) within 5 calendar days of any exceedance of the discharge conditions specified in B. above, explaining the limitations exceeded, the cause and the measures taken to mitigate it and to prevent reoccurrence.

7. The authorized discharger must submit a new application and pay an application fee for discharges that exceed twelve (12) months in duration.

E. PRIOR TO COMMENCEMENT OF DISCHARGE:

The Authorized discharger must submit a dewatering and treatment plan for all wastewaters generated during the project prior to approval to discharge.

F. REQUIRED REPORTING:

The Authorized discharger shall submit monthly reports to the City listing the sample analysis for the parameters specified in section B.2. Results obtained during the previous reporting period shall be submitted no later than the 15th calendar day of the month following the completed reporting period. The required discharge report must be faxed or delivered to:

Environmental Services, Business Operations
City of Tacoma
326 East D Street
Tacoma, WA 98421
Fax (253) 502-2295

G. ENFORCEMENT:

Violations of this Authorization or of Tacoma Municipal Code Chapter 12.08 may be subject to Notices of Violation w/Civil penalties of up to $5000.00 per violation per day.

ON BEHALF OF THE CITY OF TACOMA

11-25-13
Dated

Dan C. Thompson, Ph.D.
Business Operations Division Manager
Environmental Services

The 24-hour emergency telephone number for City of Tacoma Sewer Transmission Operation and Maintenance is (253) 591-5595. The regular business hours (Mon-Fri 8:00 A.M. to 4:30 P.M.) number is (253) 591-5588. FAX (253) 502-2295

APPENDIX HH

Noise Variance – City of Tacoma

(04-2013)

Noise Variance Application

City of Tacoma • 747 Market Street, Room 345 • Tacoma, WA 98402-3769 • (253)591-5030

This application is for a variance to City of Tacoma Noise Enforcement regulations; *Tacoma Municipal Code* Chapter 8.122. Answer all questions and provide a site plan. Print clearly, applications may be delayed if the information is incomplete or illegible. If additional space is required, summarize on this form and attach separate documentation as needed. If you need more help please contact Building and Land Use Services (253) 591-5030.

APPLICANT INFORMATION

Name of Organization/Business	Washington State Department of Transportation		
Name of Individual Representing the Organization	Carrie M. Berry – Environmental Manager		
Applicant Address	724 Quince Street, Ste. 206, PO Box 47376 – Olympia, WA 98504		
Phone Number	(360) 709-8147	Date of application submittal	TBD

SITE INFORMATION

1. Location of the site where the noise variance is requested?

   Please see the attached site plan. The project limits are within WSDOT Right of Way. Interstate I-5 – MP 132.84 to MP 134.41.

   A site plan is also required. The site plan shall include: street names, structure locations, topography, distance to residences, and the location where the noise will originate. The plan needs to be drawn to scale with a north arrow.

2. Describe the activity?

   I-5: M Street to Portland Avenue - HOV

   The project replaces I-5 mainline pavement and resurfaces several ramps at the I-5/I-705/SR 7 Interchange. The project also demolishes and reconstructs two new bridges spanning I-5 at Pacific Avenue and McKinley Avenue. A new northbound bridge will be constructed over the SR 7/I-705 interchange to match the realignment of northbound I-5. The project widens I-5 for HOV lanes northbound and southbound between M Street and the ending Milepost 134.41. Portions of the on-and off-ramps at the I-5/I-705/SR7 Interchange will be reconstructed and several retaining walls will be added. In addition, several stormwater management facilities will be constructed.

3. Dates of the activity that require a noise variance?

   Estimated project dates are: Between January & April 2014 to December 2017

4. Hours of day when the activity is to occur?

   Construction schedule includes daytime and nighttime work.

5. Reasons for requesting a noise variance?

The noise variance is requested to allow for night work. By limiting some types of work and night hours, WSDOT minimized impacts to motorists who not only use the highway system, but also to motorists who use city streets near the highway. Allowing night work will help to prevent

RECEIVED
APR 12 2013
OR HOV Office

traffic accidents and congestion and promote the safety of workers and the travelling public in construction areas.

6. List all equipment that is proposed to make noise above City limits and hours of operation.

   Work may occur nightly between the hours of 9:00 p.m. and 7:00 a.m. Sunday through Thursday and between 9:00 p.m. and 9:00 a.m. on Friday, Saturday holidays.

   Types of construction equipment expected to operate onsite are listed below. The dBA values are an average of recorded sound levels for the category type. Some roadway construction equipment does not produce measurable low-frequency sound levels. As a result, WSDOT does not measure equipment or keep data for those sound levels (recorded as NA).

Equipment	Reference SL dBA at 50'	Equipment	Reference SL dBA at 50'
Air compressors	81	Hydraulic breaker & shears	NA
All terrain forklift	70	Impact wrench	NA
Backhoe or Loader	82	Jackhammer	91
Bulldozer	84	Light plant	73
Concrete pump truck	70	Man lift	NA
Concrete trucks	78	Paver	81
Concrete vibrator	85	Pick-up trucks	52
Concrete drill	89	Pile Driver	111
Cranes	82	Pipe Ramming Equipment	90
Diesel/Electric welders	NA	Pressure washer/Sand blaster	NA
Drill rig	87	Rollers	76
Dump trucks	86	Saws	87
Excavator	84	Rotomill (Pavement Grinder)	81
Flatbed Trucks	74	Sweeper	77
Generators	72	Vactor trucks	85
High pressure jet grout pump	82	Water trucks	72
Hoe Ram	97	Water pumps	81

7. What techniques or conditions will be implemented to reduce the impact to the community?

   The following measures are considered the best practical noise control measures and will be implemented to mitigate and minimize the effects of nighttime construction noise:

   - All vehicles with an obstructed view to the rear shall be equipped with ambient noise-sensitive backup warning devices. A backup observer is permitted in lieu of back warning devices, except while operating dump trucks in reverse.

Noise Variance Application

City of Tacoma ▪ 747 Market Street, Room 345 ▪ Tacoma, WA 98402-3769 ▪ (253)591-5030

- All trucks performing export haul during nighttime hours shall have aluminum beds, rubber of aluminum bed liners, or bed liners approved by the Engineer.
- Truck tailgate banging is prohibited. All truck tailgates shall be secured to prevent excessive noise from banging.
- A copy of the noise variance shall be kept on the project site at all times.
- Stationary equipment, such as light plants, generators, and compressors shall use noise mitigation shields, noise blankets, skirts, or other means available that do not interfere with engine operation, as approved by the Engineer.

SITE CONTACT

8. The applicant shall provide a single point of contact that is on-site during the time of the noise variance to respond to complaints from the community. (It must be someone who is in charge and has the authority to make changes, if required.)

   Name: Neal Uhlmeyer – Construction Project Engineer

   WSDOT Lacey Project Office

   7912 Martin Way, Suite E

   Lacey, WA 98516

9. Site contact phone numbers during the time of the noise variance.

   Office: (360) 412-3421

For Official Use Only **ID#:**

Related Service Order #, Notification #, and/or Work Order #: _____

Conditions of the Noise Variance

The following Noise Code regulations shall be modified as noted below, (the original regulations are shown in parentheses):

☐ **8.122.080 General prohibitions.**

No person shall make, continue, or cause or permit to be made or continued any sound attributable to any device that, increases the total sound level by the limits in this table when measured at or within a receiving property:

	Outdoors	Indoors
Everyday 7:00 a.m. to 10:00 p.m.	(10 dBA)	(6 dBC)
Everyday 10:00 p.m. to 7:00 a.m.	(5 dBA)	(3 dBC)

Maximum permissible source sound level in excess of increase in total sound level above the ambient sound level.

No person shall make, continue, or cause or permit to be made or continued any impulsive sound, attributable to the source, that increases the total sound level by___ (15 dBA) or more above the ambient sound level, when there are less than ___ (ten) impulses per hour between the hours of _____ (7:00 a.m. and 10:00 p.m.), less than ___ (four) impulses within one hour between the hours of _____ (10:00 p.m. and 7:00 a.m.). If the number of impulses exceeds that set forth in this subsection, the sound level limits in Table 1 of subsection A shall apply.

☐ **8.122.090 Construction.**

After hours work on weekdays and weekends shall be allowed, provided that no sound created by the work exceeds the following limits above ambient:

	Outdoors	Indoors
Weekdays 10:00 p.m. to 7:00 a.m.	(5 dBA)	(3 dBC)
Weekends and federal holidays 9:00 p.m. to 9:00 a.m.	(5 dBA)	(3 dBC)

☐ **8.122.100 Commercial music.**

No person shall make or cause or permit to be made or caused any music originating from or in connection with the operation of any commercial establishment or enterprise when the level of sound (above the ambient) attributable to such music, as measured inside any receiving property dwelling unit:

	Outdoors	Indoors
Weekdays 7:00 a.m. to 10:00 p.m.	(6 dBA)	(6 dBC)
Weekends and federal holidays 7:00 a.m. to 10:00 p.m.	(5 dBA)	(3 dBC)

No person shall make or cause or permit to be made or caused any music originating from or in connection with the operation of any commercial establishment or enterprise when the level of sound attributable to such music is plainly audible from a distance of at least _____ (one hundred feet) in any direction from the property line of the commercial establishment.

☐ **Additional comments:**

- ☐ The decibel level at the property line of the site shall not exceed _____ dBA, and _____ dBC.
- ☐ If the single point of contact changes, the applicant will provide written notice two weeks in advance.
- ☐ Other: See attached sheet.

If not modified above, all other conditions of the Noise Code apply.

☐ **Approved**, see the conditions above	☐ **Denied**

By signing below, the applicant attests to the accuracy of the information submitted and acceptance of all the conditions, if any, imposed by the variance.

Carrie M. Berry — Applicant Signature — 3/21/13 — Date

Carrie M. Berry — Applicant Name (printed) — 360-709-8147 — Applicant Phone Number

Director or Authorized Representative: — Date:

Noise Variance Application

City of Tacoma ▪ 747 Market Street, Room 345 ▪ Tacoma, WA 98402-3769 ▪ (253)591-5030

Official Use Only **ID#:**

Related Service Order #, Notification #, and/or Work Order #:

Conditions of the Noise Variance

All provisions of the Noise Code TMC 8.122 shall apply unless expressly modified below:

☐ **8.122.080 General prohibitions.**

☒ **8.122.090 Construction.**

After hours work on weekdays and weekends shall be allowed, provided that no sound created by the work exceeds the following limits above ambient:

	Outdoors	Indoors
☒ Weekdays 10:00 p.m. to 7:00 a.m.	N/A	N/A
☒ Weekends and federal holidays 9:00 p.m. to 9:00 a.m.	N/A	N/A

☐ **8.122.100 Commercial music.**

☒ **Additional comments:**

☒ Provide written notice of after hours work schedule, including site contact phone number, to be provided to adjacent property owners prior to the start of work. As described below.

☐ If the single point of contact changes, the applicant will provide written notice to adjacent property owners two weeks in advance.

☐ After hours activity/work shall not occur within 100 feet of the nearest affected residential property.

☒ Other:

Use best management practices to reduce noise during late evening and early morning work, consistent with mitigation proposed in the application. Limit excessively loud equipment to day time hours when possible. Notify residents within 500 feet of night work consisting of pile driving and hoe ram activities.

☒ **Approved,** see the conditions above	☐ **Denied**

By signing below, the applicant attests to the accuracy of the information submitted and acceptance of all the conditions, if any, imposed by the variance.

Applicant Signature — Date

Applicant Name (printed) — Applicant Phone Number

Director or Authorized Representative: — Date: 4-9-13

Craig Kuntz — 253-594-7820

APPENDIX HH

(04-2013)

Washington State Department of Transportation

Lynn Peterson
Secretary of Transportation

Olympic Region
Tacoma/Pierce County HOV Office
724 Quince St. SE, Suite 206
P.O. Box 47376
Olympia, WA 98504-7376
360-709-8130
360-709-8131 Fax
TTY: 1-800-833-6388
www.wsdot.wa.gov

March 21, 2013

Craig Kuntz
City of Tacoma Building and Land Use Services
747 Market Street
Tacoma, WA 98402-3769

RE: Noise Variance Request for the Tacoma/Pierce County HOV Program
I-5: M Street to Portland Avenue - HOV

Dear Mr. Kuntz:

The Washington State Department of Transportation is submitting this request for a Noise Variance for after hours construction within the Tacoma city limits. WSDOT anticipates the construction of the I-5: M Street to Portland Avenue – HOV project to begin between January and April 2014 and end by December 2017.

A portion of the project work needs to be performed at night due to construction logistics and safety concerns for the traveling public and construction crews.

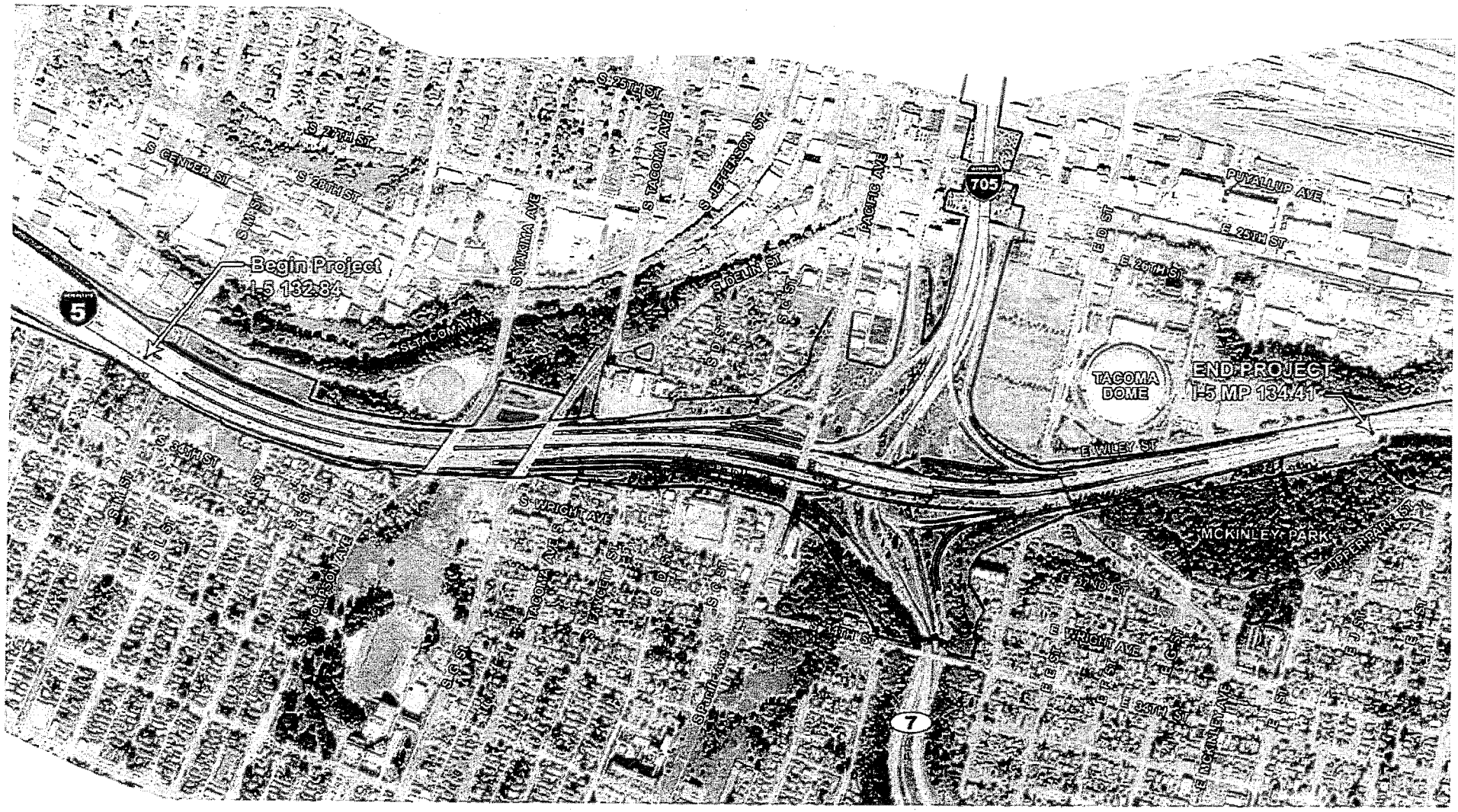
A Noise Variance Application and Site Plan are enclosed for your review.

Thank you for your consideration of this application. If you have any questions or need additional information, please contact Joanne Neugebauer-Rex at (360) 709-8179.

Sincerely,

Carrie M. Berry
Environmental Manager
WSDOT Tacoma/Pierce County HOV Program

cc: Joe Perez, Project Engineer, w/o attachments



Legend

Right of Way and Limited Access

New Edge of Pavement

0 300' 600'

Figure 1

I-5: M Street to Portland Ave - HOV Noise Variance Display

Tacoma/Pierce County HOV Program

Washington State Department of Transportation

G:\DesignDisplays\HOV Program\MP3497 NoiseVariance\MP3497_NoiseVariance.psd Created by Cindy Shannon 3/8/2013

APPENDIX II

Waste Disposal Authorization – Tacoma Pierce County Health Department

Tacoma - Pierce County
Health Department
Healthy People in Healthy Communities
www.tpchd.org

No. 1651B

WASTE DISPOSAL AUTHORIZATION

( ) Non-Asbestos ( ) New
( ) Asbestos (PSCAA Case # _____) **(XX) Amendment**

A. Generator Name: McKinley Park – Washington State Department of Transportation
B. Generator Address: McKinley Park, Tacoma WA
C. Transporter Name: Contract Hauler
D. Technical Contact: Trent Ensminger, Hazardous Materials Specialist, WSDOT Phone: (360)570-2587
E. Waste Description: Contaminated Soils
( ) Sludge (X) Solid (XX) PCS ( ) Other
F. Estimated Quantity: **Amended to 12,000 Tons (Projected 1,700 Yds^3)**
G. **Actual Quantity (Filled in upon disposal):** _____
H. Multiple Loads: (X) Yes ( ) No
I. Dates of Disposal: September 3, 2013 through ~~August 31, 2014~~ December 31, 2016
J. Testing: HCID, cPAH's, Total Metals (RCRA-8)
K. Reviewed by Department of Ecology: ( ) Yes (XX) No
L. L. Disposal/Transportation Requirements: **A copy of this WDA must be transported with EACH load of waste and presented to the LRI Landfill Scalehouse Operator.** Soils demonstrating excessive odors are not suitable for use as daily cover and shall be directly buried (disposed of) in the landfill. If odors are not excessive and the soils physical characteristics are suitable for utilization as a daily cover then the soils may be used as alternative daily cover. Loads shall be covered during transport to the landfill to prevent fugitive emissions of contaminated soils. Load sizes shall comply with conditional-use and solid waste permit criteria.
M. Facility: **(X X) LRI Landfill (304th Street LF), 30919 Meridian Street, Eatonville, WA**

CERTIFICATION

I hereby certify that I have personally examined and am familiar with the information submitted in this document and any supporting material. Based on my inquiry of those individuals immediately responsible for obtaining the information, the information submitted is true, accurate and complete to the best of my knowledge and ability and that all known and suspected hazards have been disclosed. I agree that the generator and/or transporter will abide by all conditions specified in line (L) or any attachments thereto.

2/26/14 — Date
FIELD ENGINEER — Title
Signature

AUTHORIZED BY:

Andy Comstock, TPCHD 253 798 6538

APPROVED

FEB 26 2014

TACOMA-PIERCE COUNTY HEALTH DEPT.
ENVIRONMENTAL HEALTH DIV.
For Official Use Only

Cc: LRI LF Scalehouse via Fax – 253 875 7205

Tacoma - Pierce County
Health Department
Healthy People in Healthy Communities
www.tpchd.org

No. 1660

WASTE DISPOSAL AUTHORIZATION

Tacoma Pierce County
Health Department

4/5/2013 2:13:28 PM
Clerk 48-12
Waste Disposal Authorization
$145.00
Receipt #296044
visa:005353 McDonough-WDA 1660 Vau

(XX) Non-Asbestos
( ) Asbestos (PSCAA Case # _____)

(XX) New
( ) Renewal

1 of 1

A. Generator Name: Washington State Department of Transportation – I-5 and SR-705 **VAULT 1**

B. Generator Address: Interchange of Interstate 5 and State Route (SR) 705, Tacoma WA

C. Transporter Name: Contract Hauler

D. Technical Contact: Tricia DeOme, GeoEngineers Phone: 253 383-4940

E. Waste Description: Contaminated Soils – Originated from Coal Gasification Plant
( ) Sludge (**XX**) Solid (**XX**) PCS ( ) Other

F. Authorized Quantity: 15,000 Tons

G. **Actual Quantity (Filled in upon disposal):** _____

H. Multiple Loads: (**XX**) Yes ( ) No

I. Dates of Disposal: April 5, 2013 through December 31, 2016

J. Testing: NWTPH-Dx & -Gx, VOC's, SVOC's, PAH's, Cyanide, Total Metals (RCRA-8)

K. Reviewed by Department of Ecology: (XX) Yes ( ) No

L. Disposal/Transportation Requirements: **A copy of this WDA must be transported with EACH load of waste and presented to the LRI Landfill Scalehouse Operator.** These contaminated soils are NOT suitable for use as an Alternative Daily Cover (ADC) thus must be directly disposed of within the landfill. Soils shall either be co-mingled with MSW or, if segregated, covered with a suitable ADC (or tarp) at the end of each day. Loads shall be covered during transport to the landfill to prevent fugitive emissions of contaminated soils. Load sizes shall comply with conditional-use and solid waste permit criteria.

M. Facility: **(X X) LRI Landfill (304th Street LF), 30919 Meridian Street, Eatonville, WA**

CERTIFICATION

I hereby certify that I have personally examined and am familiar with the information submitted in this document and any supporting material. Based on my inquiry of those individuals immediately responsible for obtaining the information, the information submitted is true, accurate and complete to the best of my knowledge and ability and that all known and suspected hazards have been disclosed. I agree that the generator and/or transporter will abide by all conditions specified in line (L) or any attachments thereto.

5/8/2013 Date | Env. Mngr. Title | Jeff Dawyer Signature

AUTHORIZED BY:

Andy Comstock, TPCHD 253-798-6538

Cc: LRI LF Scalehouse via Fax – 253 875 7205

APPROVED
APR 05 2013
TACOMA-PIERCE COUNTY HEALTH DEPT.
Environmental Health Division
For Official Use Only